

NASA Contractor Report 4045

Study of Wind Change for the Development of Loads Reduction Techniques for the Space Shuttle

S. I. Adelfang

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I. INTRODUCTION

Wind profile monitoring is an important aspect of pre-launch assessments of Space Shuttle ascent performance and loads variables. A persistent pattern of loads exceedances and a forecast of no change in the wind profile is the basis for a launch postponement. The validity of the postponement is established by assessment of loads based on the wind profile at the scheduled time of launch. The probability of an invalid postponement is decreased as forecasting skill increases. At present, there is no technique other than persistence for forecasting of perturbations in a wind profile. The lack of persistence of a critical perturbation could lead to an invalid postponement. Similarly, the validity of a "go" decision can also be established. An invalid "go" is obviously more important than an invalid "no go" because it could, in the worst case, result in the loss of the vehicle.

The probability of invalid "go" and "no go" decisions can be reduced by development of techniques for reducing wind loads. This can be achieved by improving the technique used for wind biasing. At present, wind biasing of the Space Shuttle launch trajectory is with respect to the monthly mean. More accurate wind biasing could be achieved by utilizing wind profile information obtained on the day of launch. The purpose of this report is to provide information on short term (< 12 hours) changes in the wind profile. This information can be used for establishment of the accuracy of a day-of-launch wind biasing scheme for the Space Shuttle.

The analyses of wind change described in the six sections that follow this introduction are for the most part concerned with Vandenberg Air Force Base. Wind component change profiles are

defined in Section II and examples are presented to illustrate the effect of filtering on wind change. Statistics of wind change within altitude bands listed in Appendix A are described in Section III. A study of the maximum 3.5-hour vector wind change is described in Section IV. A model for wind change at a specified altitude is described and tested in Section V. The statistics of wind change as a function of altitude given in Appendices B and C are described in Section VI. A study of the effect of low-pass filtering on the standard deviation of wind component change is presented in Section VII.

II. PROFILES OF WIND COMPONENT CHANGE

Profiles of wind component change are obtained by subtracting the wind component profile observed at T-X hours from the profile observed at T-0 hours. Thus, the sign of the wind component change is in agreement with the sign convention used in the standard meteorological wind coordinate system; i.e., the zonal component, u , of the wind vector is positive for a west (west to east) wind and negative for an east (east to west) wind. A negative u -component change can be described as an "easterly tendency" which is characterized by a decreasing west wind, or a shift from a west wind to an east wind, or an increasing east wind. Similar descriptions can be made for positive u -component change (westerly tendency), positive v -component change (southerly tendency), and negative v -component change (northerly tendency).

An assessment of the contribution to wind component change by wind perturbations in various wavelength bands has been achieved by analysis of wind change calculated from smoothed profiles. Wind profile smoothing is achieved by application of a low-pass filter. If two wind profiles are smoothed by the same filter, then the difference or wind change between the profiles is also smoothed. Illustrations of the effect of wind profile smoothing on the wind change profile between 9 and 16 km are presented in Figures 1 and 2; each figure contains 12 plots of wind component change observed during a 3.5 hour period at Vandenberg Air Force Base (VAFB). The six plots on the left side of each page are for the u -component change; the right side is for the v -component change. The first plot at the bottom represents wind change that has been calculated from unfiltered profiles. Scanning upward, beginning with the second plot from the bottom, illustrates the effect of an increasing amount of smoothing; the

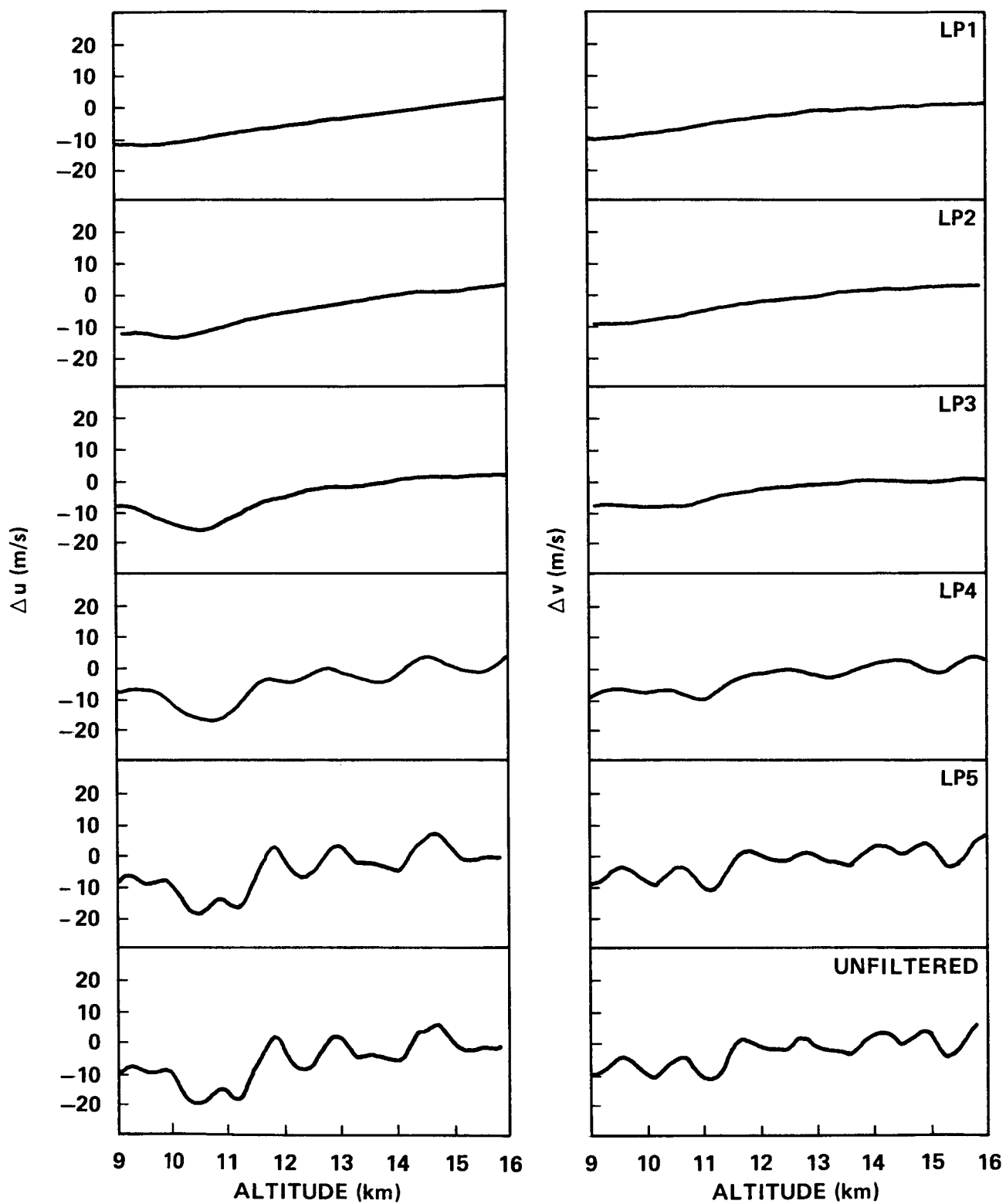


FIGURE 1. WIND COMPONENT CHANGE PROFILES (9-16 km) CALCULATED FROM UNFILTERED AND LOW-PASS FILTERED VAFB WINTER PROFILE PAIR 22.

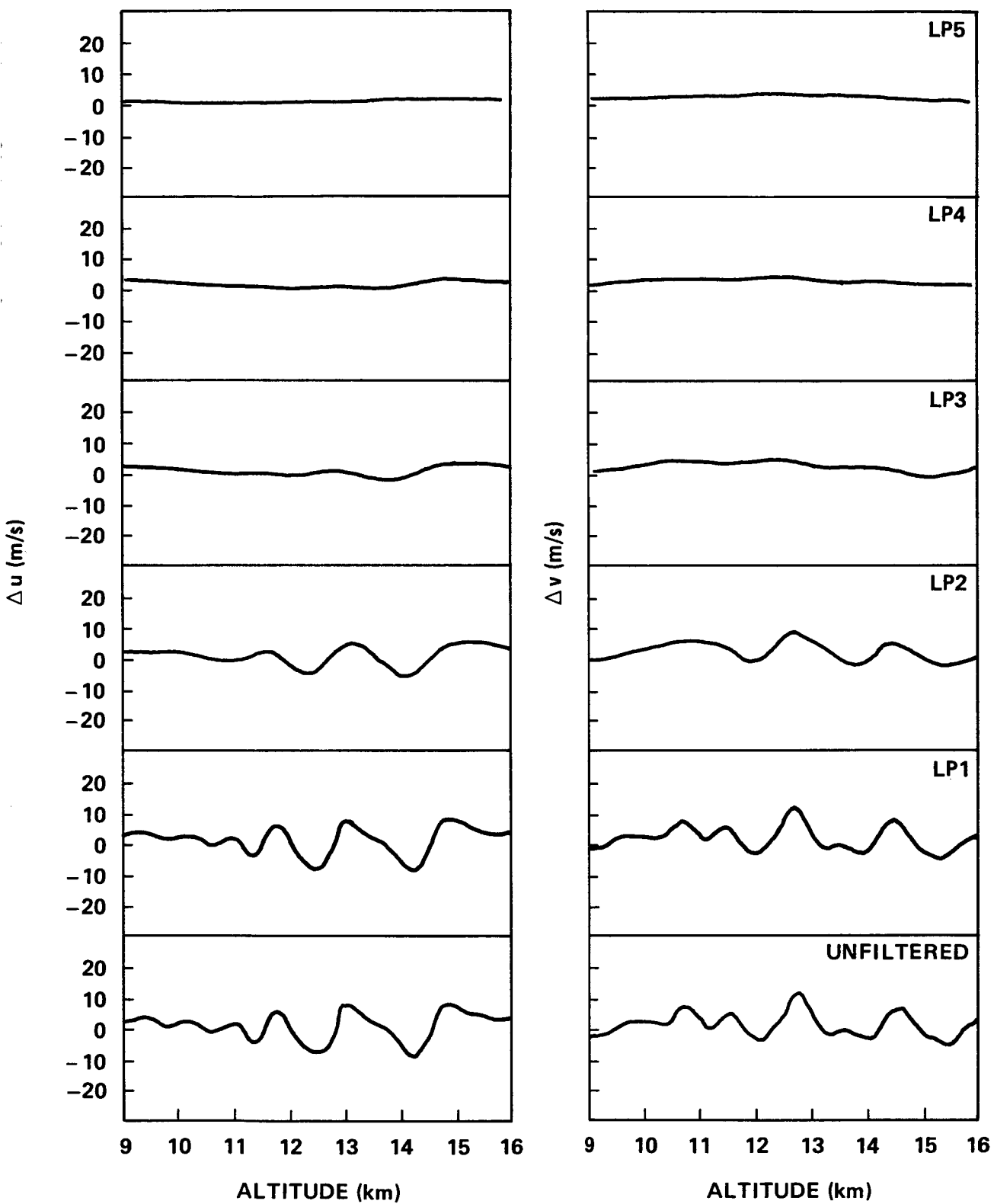


FIGURE 2. WIND COMPONENT CHANGE PROFILES (9–16 km) CALCULATED FROM UNFILTERED AND LOW-PASS FILTERED VAFB WINTER PROFILE PAIR 26.

second through sixth plot were calculated from low-pass filtered wind profiles with nominal cut-off wavelengths, λ_c , of 500, 1500, 3000, 6000, and 9000 m, respectively. The plots in Figures 1 and 2 clearly indicate that wind component change is strongly affected by smoothing the wind profiles.

An examination of the plots across the top of Figures 1 and 2 indicates an important difference between the wind change for profile pair 22 and pair 26. For pair 22 (Figure 1), a significant part of the wind change remains for $\lambda_c = 9000$ m; thus, a relatively large contribution to wind change is made by wavelengths greater than 9000 m. In contrast, for pair 26 (Figure 2), very little wind change remains for the maximum smoothing. A measure of the effect on wind change imposed by wind profile smoothing is the percent reduction of variance, VR, in the wind change profile. The results summarized in Table 1 indicate that only 35-48 percent of the component wind change variance is removed by the maximum smoothing ($\lambda_c = 9000$ m) of the profile pair 22 (Case I). Thus, a large percentage (52-65) of the wind change variance is attributed to wavelengths larger than 9000 m; it is also indicated that only 30-44 percent of the wind change variance is attributed to wavelengths less than 3000 m. For pair 26 (Case II), 98 percent of the wind change is removed by the maximum smoothing. Thus, nearly all the wind change is attributed to wavelengths less than 9000 m; in addition, 86-88 percent is attributed to wavelengths less than 3000 m. The conclusion drawn from these examples is that large wavelengths can make a significant contribution to wind component change during a 3.5 hour time interval. To establish the extent of this behavior at VAFB, the statistics of variance reduction are examined. The distribution of VR for $\lambda_c = 9000$ m is given in Table 2. It is indicated that 3 cases had small VR (< 20 percent), 6 cases had

Table 1. Effect of Filtering on Wind Change in the 9-16 km Altitude Layer. Two Examples: Trend (Case I), No Trend (Case II)

	Low-Pass Filter Cut-Off Wavelength, m	Variance $\sigma_{\Delta u}^2$ (m ² /s ²)	VR(1)	Variance $\sigma_{\Delta v}^2$ (m ² /s ²)	VR
Case I(2)	-	48.7	-	21.9	-
	500	48.7	0	21.7	1
	1500	43.0	12	15.8	28
	3000	34.2	30	12.3	44
	6000	33.2	32	18.4	16
	9000	25.4	48	14.3	35
Case II(3)	-	18.6	-	14.4	-
	500	18.6	0	14.4	0
	1500	10.4	44	8.1	44
	3000	2.6	86	1.7	88
	6000	.90	95	.41	97
	9000	.28	98	.35	98

(1) VR = Percent reduction of variance = 100(1-R)

R = Ratio of wind component change variance obtained from filtered and unfiltered wind profiles

(2) Jimsphere profile pair 22 from the 50-Pair VAFB-winter sample

(3) Pair 26, data base same as in Note (2)

Table 2. Distribution of Variance Reduction,
VR, of u-Component Wind Change at
VAFB for $\lambda_c = 9000$ m, 50 Pairs

<u>VR (Percent)</u>		<u>Number of Cases</u>
<u>></u>	<u><</u>	
	0	1
0	10	
10	20	2
20	30	
30	40	
40	50	2
50	60	3
60	70	1
70	80	11
80	90	12
90	100	18

moderate VR ($20 \leq VR < 70$), and 41 cases had large VR (> 70). The contribution to wind change by wavelengths greater than 9000 m is inversely proportional to VR. Therefore, a moderate to large contribution to wind change for $\lambda_c = 9000$ m is indicated in 9 out(4) of 50 cases. The remaining 41 cases indicate a small contribution by large wavelengths. Average values of VR for the 41 case and 9 case subsamples are listed in Table 3.

(4) Pairs 14, 15, 17, 18, 21, 22, 23, 31, 48

Table 3. Mean Percent Reduction of u-Component Wind Change Variance in the 9-16 km Altitude Band as a Function of Low-Pass Filter Cut-Off Wavelength, λ , VAFB, Winter, 50 Pairs

	<u>λ (m)</u>	<u>$\overline{VR}(\%)$</u>
VR ₉₀₀₀ > 70 Percent (41 Cases)	500	2
	1500	26
	3000	55
	6000	77
	9000	87
VR ₉₀₀₀ \leq 70 Percent (9 Cases)	500	1
	1500	14
	3000	32
	6000	25
	9000	30

III. STATISTICS OF WIND CHANGE WITHIN AN ALTITUDE BAND

VAFB, Santa Monica, and Kennedy Space Center (KSC) seasonal data are used for the study of wind change within the 3-9 and 9-16 km altitude bands. The components, Δu and Δv , and the modulus, w , of the wind change vector are calculated at equal altitude increments⁽⁵⁾ within the specified altitude band. The statistics calculated for each profile and altitude band include:

- o Means, standard deviations, and correlation coefficient of the wind change components
- o Mean and standard deviation of vector wind change modulus
- o Maximum wind change modulus

The eight statistics for each profile pair of the seven data bases comprise columns 2 through 9 of the data tabulations given in Appendix A. Column 1 contains the profile pair number. If any of the columns of data are scanned vertically, it is obvious that wind change within an altitude band is highly variable from profile pair to profile pair. This is supported by the statistics of w given after the last profile pair; the standard deviations of w and Max w are almost as large as (and in a few cases larger than) the mean of w .

The statistics given in Appendix A were used for the analysis of maximum 3.5 vector wind change described in Section IV.

(5) 25 m for VAFB Jimsphere data and 1000 m for Santa Monica Rawinsonde data

IV. MAXIMUM 3.5 HOUR VECTOR WIND CHANGE

Vector wind change, w , is defined as the modulus of the wind change vector with components Δu and Δv ; thus

$$w = ((\Delta u)^2 + (\Delta v)^2)^{1/2} \quad (1)$$

The maximum 3.5 hour vector wind change, $WM3.5$, in the 9-16 km altitude layer was calculated from the 50 profile pairs of each set of unfiltered and low-pass filtered VAFB winter data. The probability distributions of these sets of maxima are illustrated in Figure 3; note that the largest value plotted is the 98 percentile which is the second largest value of the sample. The largest and second largest values of each data set are listed in Table 4. As shown in Figure 3 and Table 4, the extreme values of $WM3.5$ change only slightly as λ increases to 3000 m. This supports the hypothesis that systems with inadequate capability to measure small scale perturbations in the wind profile can yield fairly accurate measurements of the largest maximum 3.5 hour wind change. A similar hypothesis is not supported for cumulative probabilities less than .87 because the distributions indicate a steady decrease of $WM3.5$ with increasing smoothing (increasing λ).

It is noted that the large maxima listed in Table 4 are caused by changes in wind direction rather than changes in wind speed. These large wind changes at VAFB could be attributed to the migration of cold-core closed circulation patterns across California and the southwestern United States during the winter and early spring. When the ten profile pairs⁽⁶⁾ containing these

(6) Pairs 6, 9, 17, 18, 19, 22, 23, 36, 37, 38

large changes are eliminated from the sample, we obtain the distribution of WM3.5 denoted by VAFB40 in Figure 4; for comparison the original distribution (VAFB50) and the distribution based on 65 KSC winter pairs are also plotted. The large difference between VAFB50 and KSC is attributed to four extreme pairs⁽⁷⁾ at VAFB. Elimination of the four pairs yields the distribution denoted by VAFB46.

(7) Pairs 17, 23, 36, 38

Table 4. Largest (I) and Second Largest (II) Maximum
3.5 Hour Vector Wind Change, WM3.5, in the
9-16 km Altitude Band for Various Low-Pass
Filter Cut-Off Wavelengths, λ

<u>λ (m)</u>	WM3.5 (m/s)	
	<u>I</u>	<u>II</u>
(8)	71.4	43.1
500	71.7	42.9
1500	69.6	42.0
3000	69.2	40.7
6000	67.1	34.6
9000	60.3	27.8

(8) Unfiltered Wind Profiles

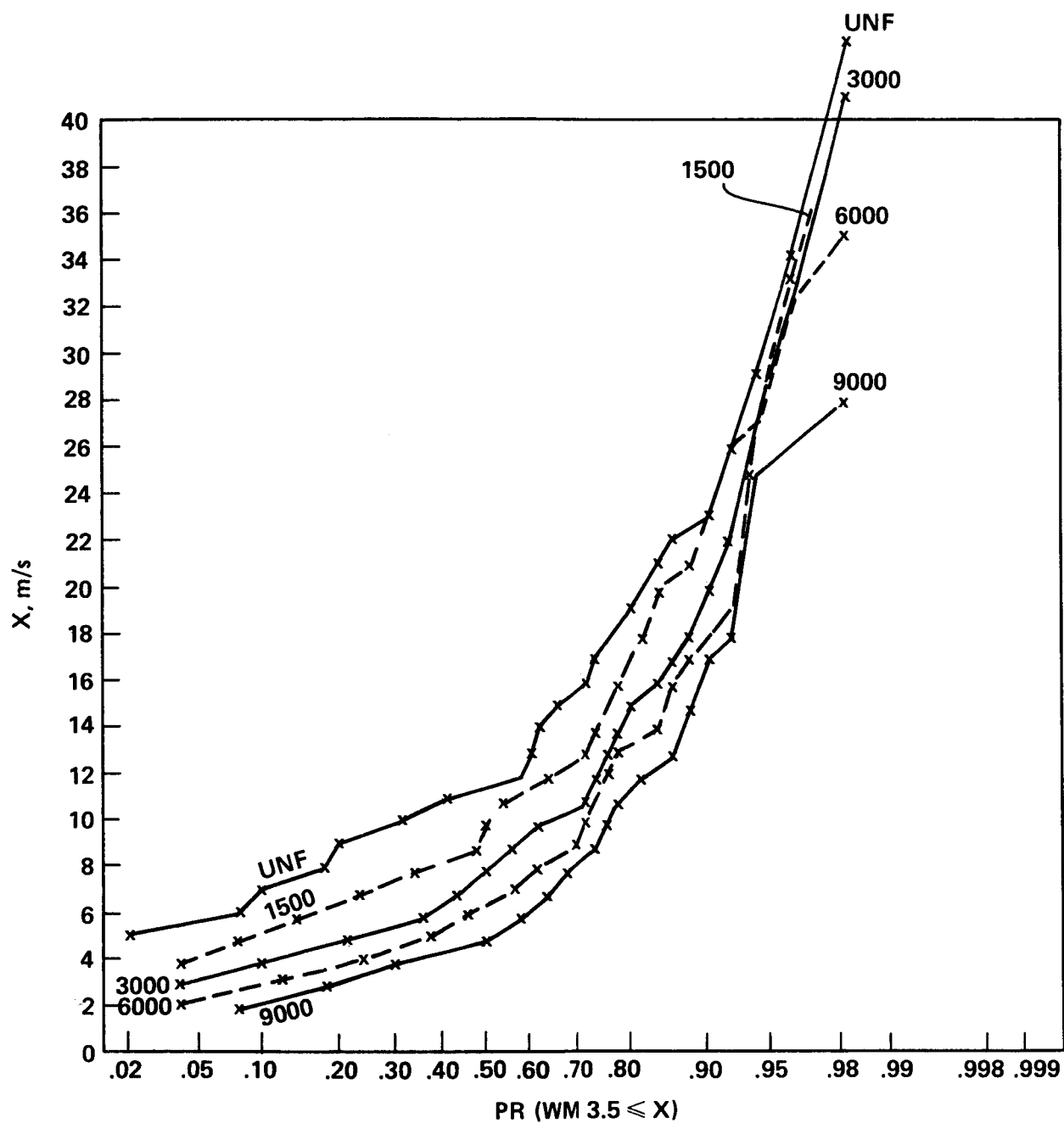


FIGURE 3. EFFECT OF FILTERING ON CUMULATIVE PROBABILITY OF MAX WIND CHANGE, VAFB WINTER $\Delta T = 3.5$ HOURS

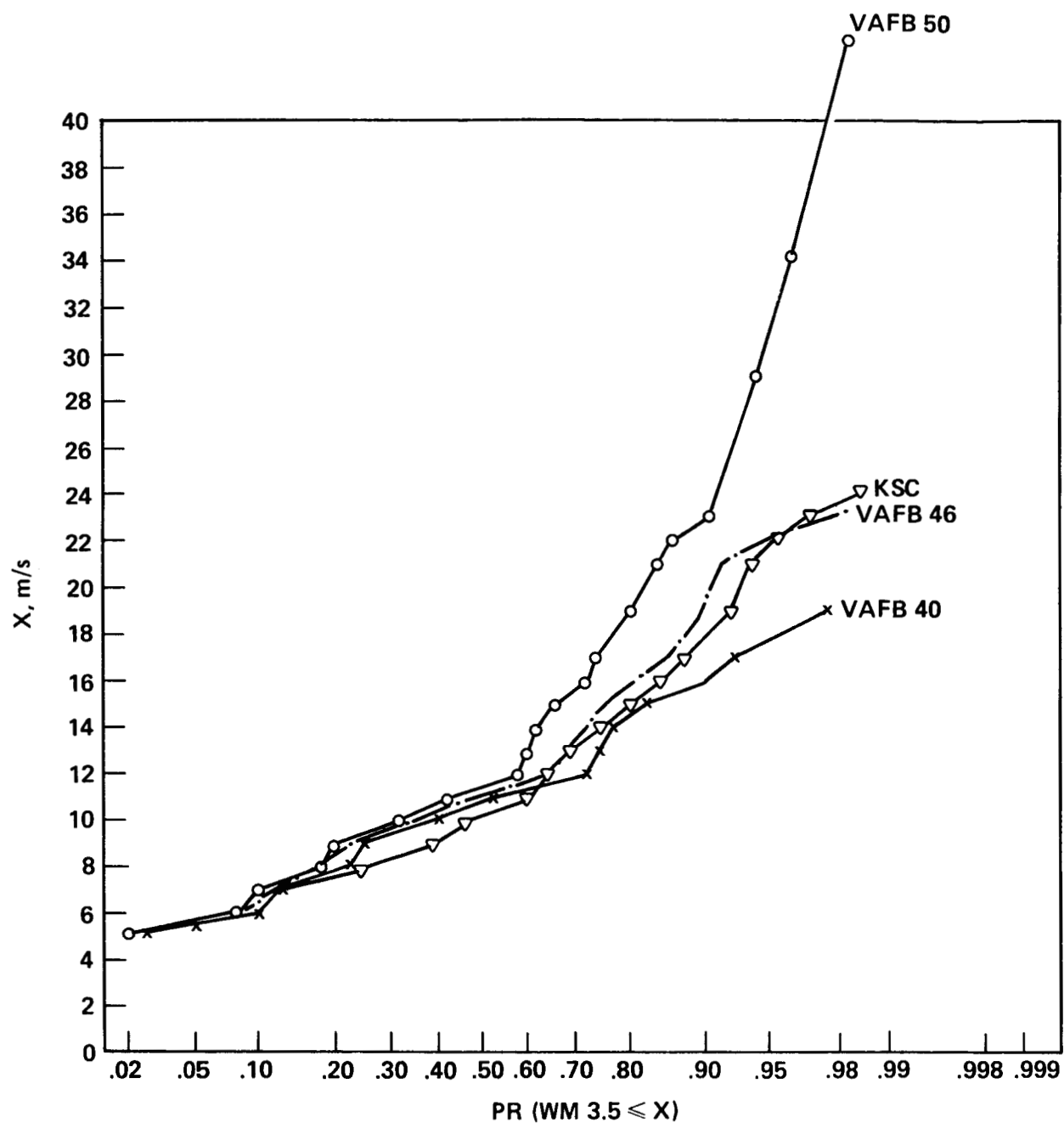


FIGURE 4. CUMULATIVE PROBABILITY DISTRIBUTION OF MAX 3.5 HOUR WIND CHANGE IN THE 9-16 km LAYER

V. A MODEL FOR WIND CHANGE AT A SPECIFIED ALTITUDE

Theoretical probability concepts for analysis of wind change at a specified altitude are described by Smith (Ref. 1). These concepts are applied to a set of VAFB Rawinsonde data by Adelfang (Ref. 2), who derived the monthly quadrivariate normal statistics of wind change for time intervals from 12 to 72 hours and altitudes from 0 to 27 km. The components, Δu and Δv , of the wind change vector are each normally distributed with zero mean and standard deviation σ given by

$$\sigma_{\Delta u} \{\Delta t\} = \sqrt{\sigma_{u_1}^2 + \sigma_{u_2}^2 - 2R_{u_1 u_2} \{\Delta t\} \sigma_{u_1} \sigma_{u_2}} \quad (2)$$

$$\sigma_{\Delta v} \{\Delta t\} = \sqrt{\sigma_{v_1}^2 + \sigma_{v_2}^2 - 2R_{v_1 v_2} \{\Delta t\} \sigma_{v_1} \sigma_{v_2}} \quad (3)$$

where u_1 and u_2 are the zonal wind components at time t_1 and t_2 , respectively, $\Delta u = u_2 - u_1$, and $\Delta t = t_2 - t_1$. Similarly, v_1 and v_2 are the meridional wind components at time t_1 and t_2 . Empirical statistics indicate that $\sigma_{u_1} = \sigma_{u_2} = \sigma_u$ and $\sigma_{v_1} = \sigma_{v_2} = \sigma_v$.

Thus, Equations (2) and (3) become

$$\sigma_{\Delta u} \{\Delta t\} = \sqrt{2} \sigma_u \sqrt{1 - R_{u_1 u_2} \{\Delta t\}} \quad (4)$$

$$\sigma_{\Delta v} \{\Delta t\} = \sqrt{2} \sigma_v \sqrt{1 - R_{v_1 v_2} \{\Delta t\}} \quad (5)$$

It has been shown that the lag correlation, $R\{\Delta t\}$, decays exponentially with increasing time interval between 12 and 72 hours (Ref. 2).

$$R_{u_1 u_2}\{\Delta t\} = \text{EXP}(-K_u \Delta t) \quad (6)$$

$$R_{v_1 v_2}\{\Delta t\} = \text{EXP}(-K_v \Delta t) \quad (7)$$

By substitution of Equations (6) and (7) into Equations (4) and (5), respectively, we obtain

$$\sigma_{\Delta u}\{\Delta t\} = \sqrt{2} \sigma_u \sqrt{1 - \text{EXP}(-K_u \Delta t)} \quad (8)$$

$$\sigma_{\Delta v}\{\Delta t\} = \sqrt{2} \sigma_v \sqrt{1 - \text{EXP}(-K_v \Delta t)} \quad (9)$$

Equations (8) and (9) represent the essential elements of a model for wind change at a specified altitude. Since Δu and Δv are each normally distributed with zero mean, the standard deviation given by Equation (8) or (9) are all that is required for determination of the probability distribution of Δu and Δv for a particular time interval.

An objective of this study is to test an extension of the wind change model to time intervals less than 12 hours. This is accomplished by utilizing the six data bases described in Table 5. The results of the study are illustrated in Figures 5 through 8. The plotted points represent the standard deviations calculated from the data bases listed in Table 5. The vertical lines extending upward and downward from the plotted points are the 95 percent confidence bands of the standard deviations.

The curve in each of the figures is derived from either Equation (8) or (9) and the parameters listed in Table 6. Similar curves can be derived for other months and altitudes between 0 and 27 km by utilizing the data presented in Ref. 2.

For time intervals between 12 and 72 hours, each curve lies within the confidence bands for the VAFB Rawinsonde data. This result, indicating good agreement between observed and predicted standard deviations, is not surprising because the model and the observations are derived from the same data base. When the model is applied to the six other data bases for time intervals equal to or less than 12 hours, the outcome is somewhat different. Good agreement occurs for five (out of six) data bases for σ_u at 10 km, three for σ_v at 12 km, and none for σ_v at 12 km. Overall, at the two altitudes studied, there is good agreement in 11 out of 24 cases. In 10 of the 13 cases for which there is not good agreement, the model over-estimates the standard deviation.

Table 5. Data Bases Used in VAFB Wind Change Study
($\Delta t \leq 12$ Hours)

<u>Description</u>	<u>Season/Month</u>	<u>Altitude Range (km)</u>	<u>Number of Pairs</u>	<u>Δt(Hr)</u>
1. Jimsphere	Winter	0-20	50	3.5
2. Santa Monica(8)	January	0-27	220	6
3. Santa Monica	Winter	0-27	880	6
4. Jimsphere	Winter	0-20	57	7
5. Santa Monica	January	0-27	186	12
6. Santa Monica	Winter	0-27	724	12

Table 6. Parameters of Equations (8) and (9) Based on January
VAFB Rawinsonde Data (1965-74)

<u>Altitude (km)</u>	<u>σ_u(m/s)</u>	<u>K_u(1/s)</u>	<u>σ_v(m/s)</u>	<u>K_v(1/s)</u>
10	18.60	.0179	16.99	.0363
12	18.34	.0146	16.01	.0390

(8) Rawinsonde

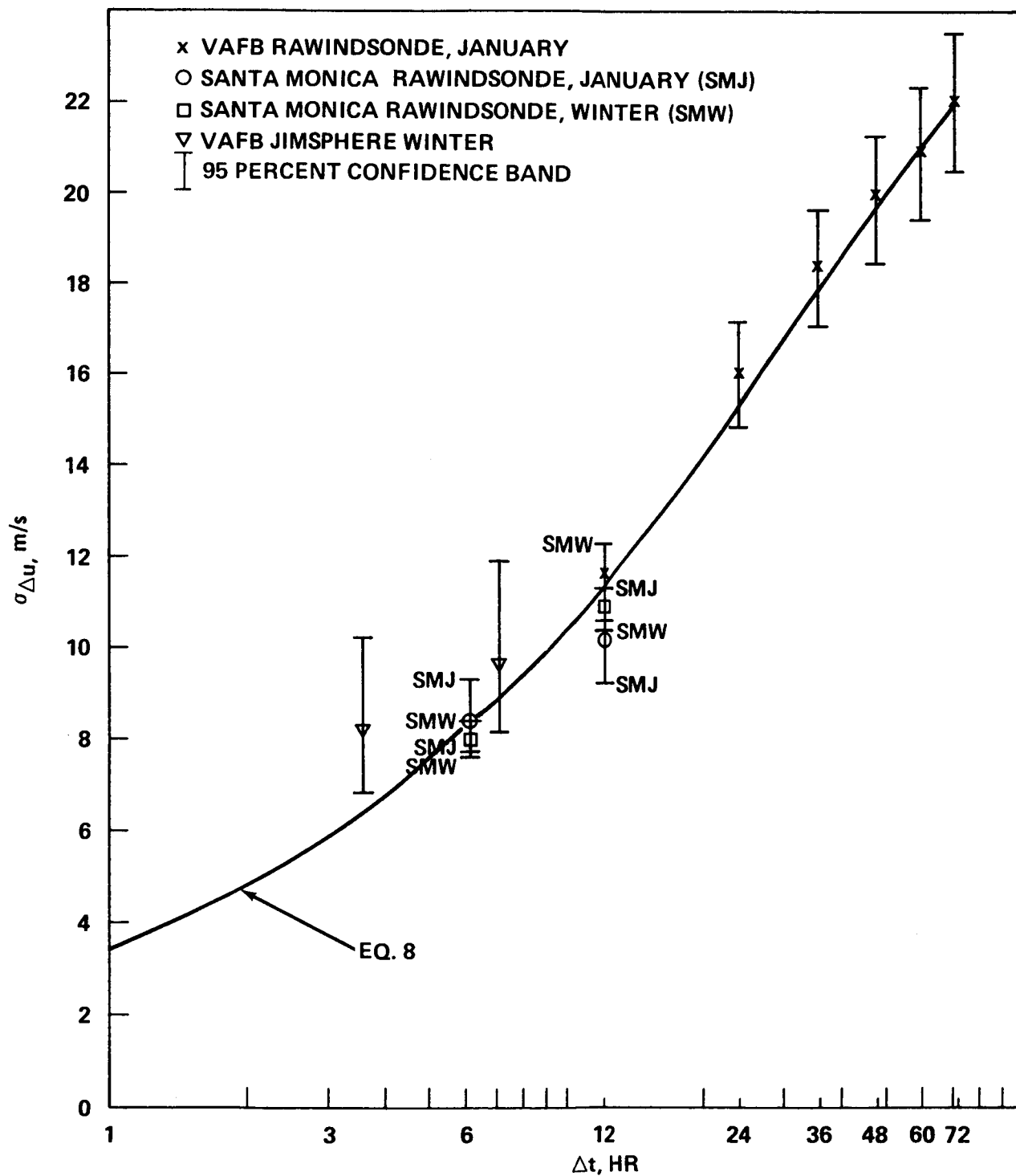


FIGURE 5. STANDARD DEVIATION OF u -COMPONENT CHANGE AT 10 km.

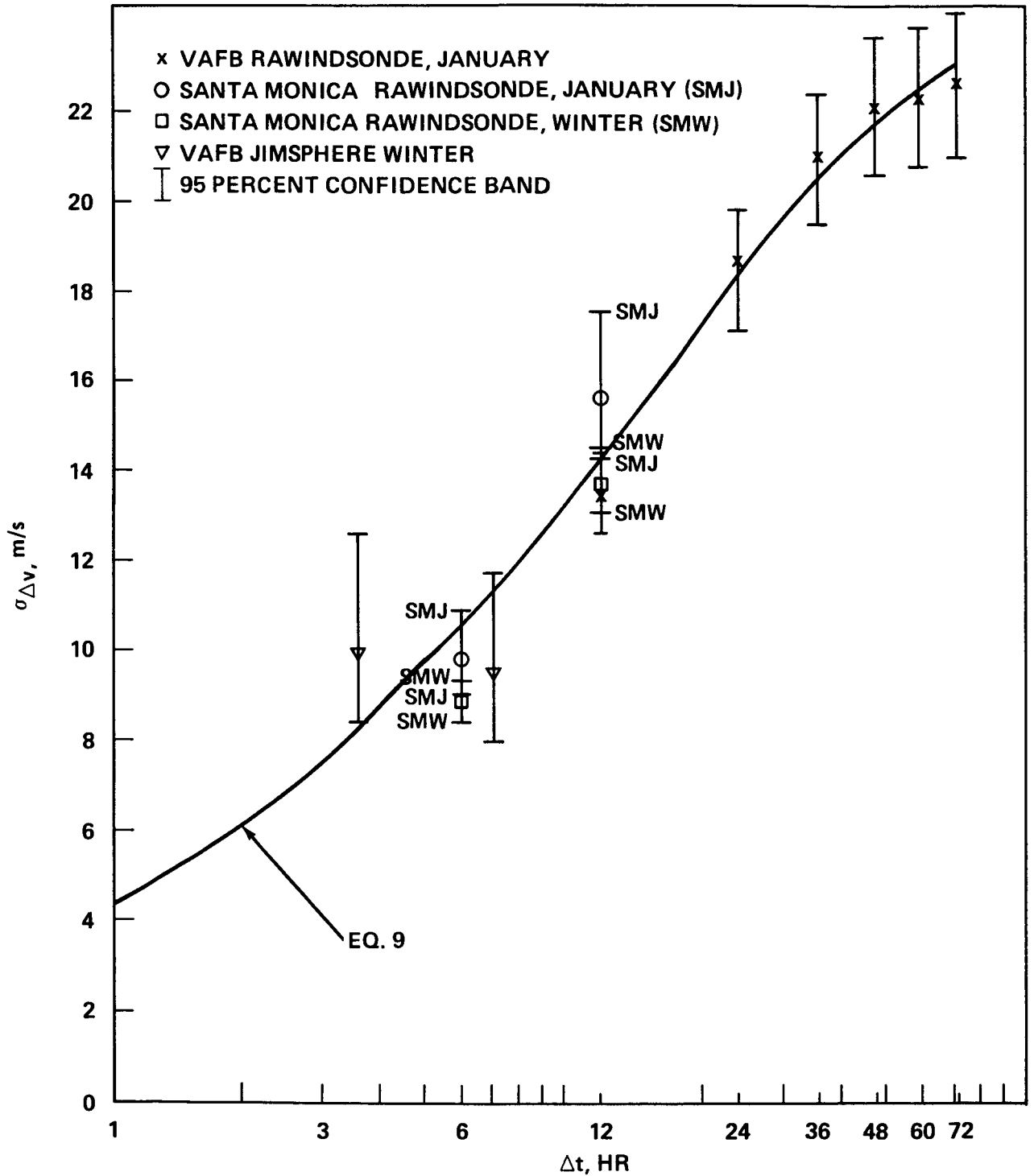


FIGURE 6. STANDARD DEVIATION OF v-COMPONENT CHANGE AT 10 km.

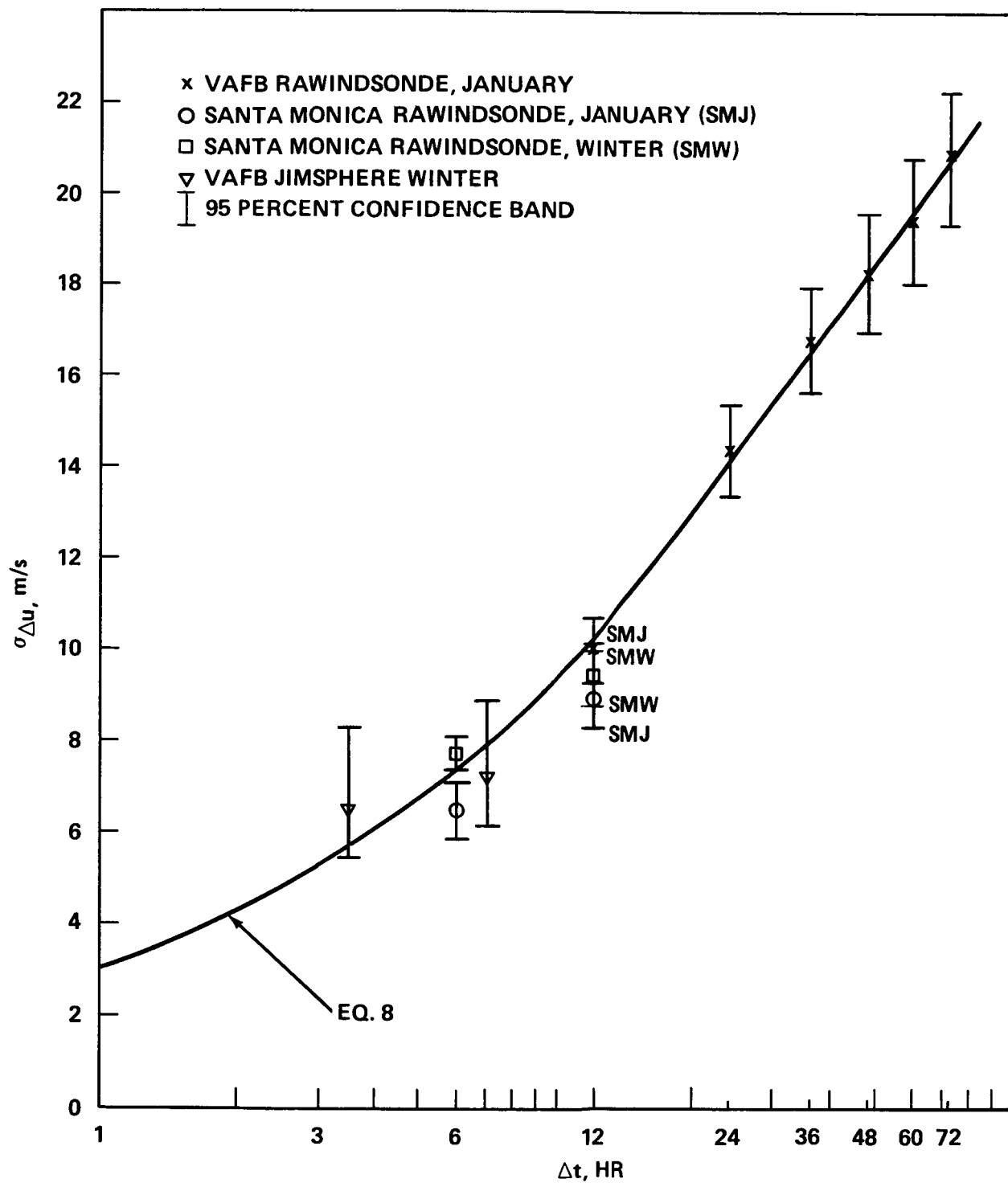


FIGURE 7. STANDARD DEVIATION OF u -COMPONENT CHANGE AT 12 km.

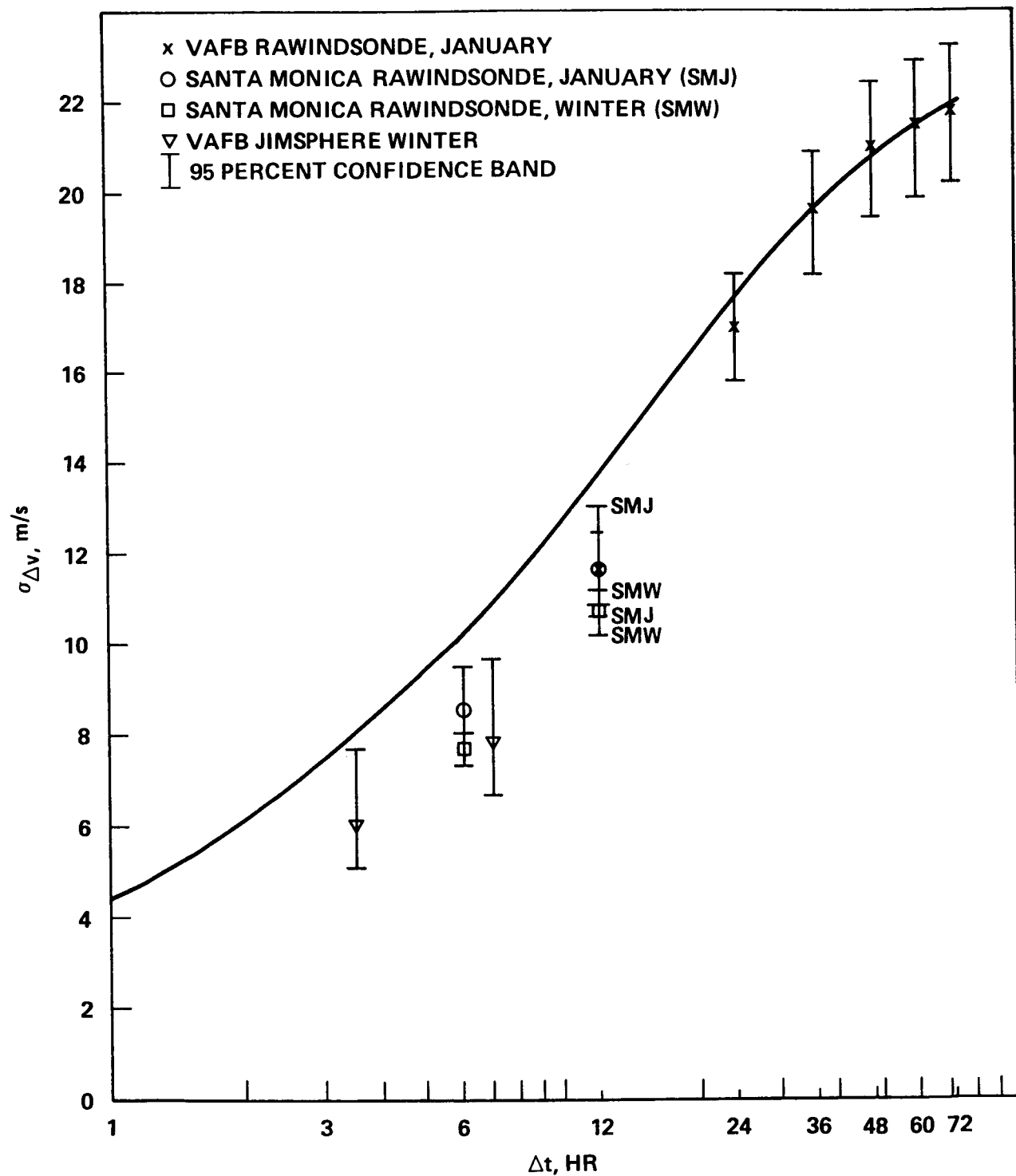


FIGURE 8. STANDARD DEVIATION OF v-COMPONENT CHANGE AT 12 km.

VI. STATISTICS OF WIND CHANGE AS A FUNCTION OF ALTITUDE

The components Δu and Δv of the wind change vector have a bivariate normal distribution which is defined by five parameters. They are the means and standard deviations of components and the correlation coefficient between the components. These parameters are generally known as the bivariate normal (BN) statistics. Appendix B contains the BN statistics for the six data bases described in Table 5; plots of these statistics as a function of altitude are in Appendix C.

VII. THE EFFECT OF LOW-PASS FILTERING ON THE STANDARD DEVIATION
OF WIND COMPONENT CHANGE AT A SPECIFIED ALTITUDE

The standard deviation of wind component change has been calculated at .5 km altitude increments from sets of 50 VAFB winter Jimsphere profiles that have been subjected to an increasing amount of smoothing. Profiles of wind component standard deviation are illustrated in Figures 9 and 10. The jagged dashed line in each figure represents the standard deviations of wind change between unsmoothed profiles; the solid line represents standard deviations of wind change between wind profiles that have had the maximum smoothing. The plotted symbols are for an intermediate degree of smoothing. If we examine the effect that smoothing has at specific altitudes, we observe that, at some altitudes, the standard deviation reaches a minimum at some intermediate degree of smoothing. As a result of this behavior, the profile of wind component standard deviation also becomes smoother as wind profile smoothing increases.

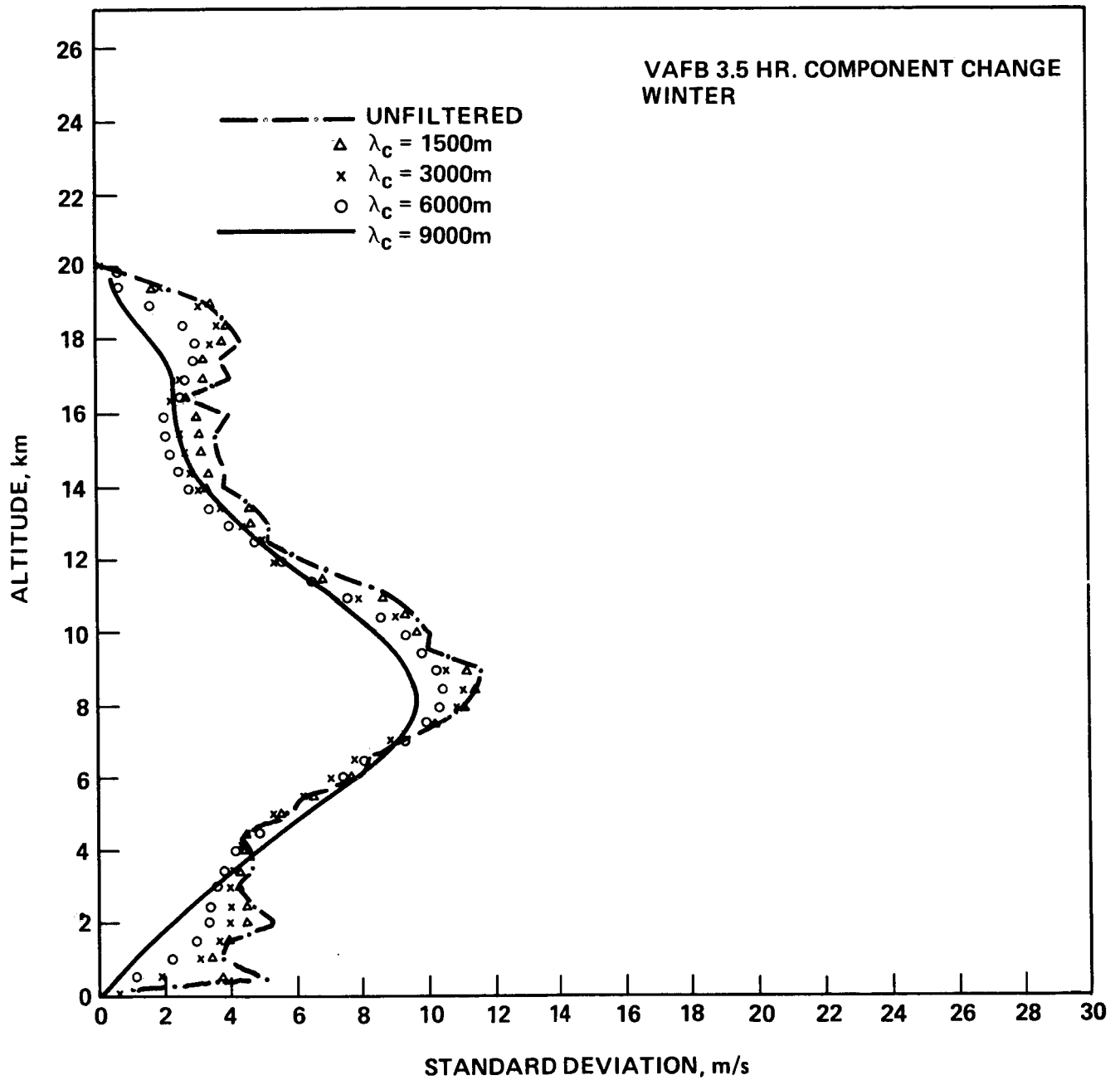


FIGURE 9. STANDARD DEVIATION OF 3.5 HOUR u -COMPONENT CHANGE AS A FUNCTION OF ALTITUDE, VAFB WINTER (50 PAIRS)

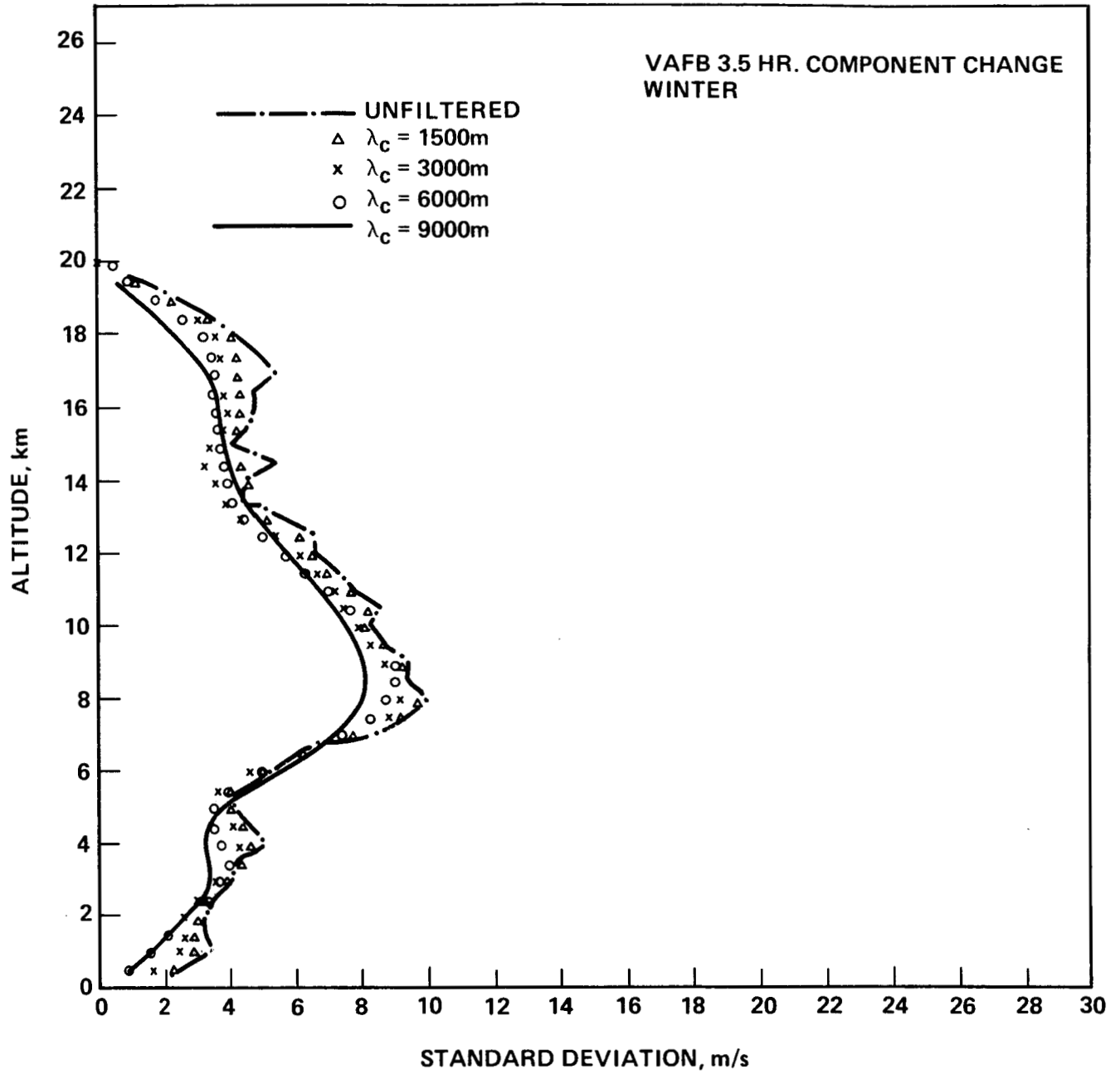


FIGURE 10. STANDARD DEVIATION OF 3.5 HOUR v -COMPONENT CHANGE AS A FUNCTION OF ALTITUDE, VAFB WINTER (50 PAIRS)

VIII. CONCLUSIONS AND RECOMMENDATIONS

The analyses and data in this report can be used in the development of methods for reduction of wind loads on the Space Shuttle during ascent. Wind biasing with respect to the monthly mean wind is part of pre-programmed launch trajectories for various missions. In situations when loads are expected to be near critical levels, methods are sought which would reduce the loads. It has been proposed that loads reduction could be achieved by optimizing the wind biasing scheme. This would be achieved by using a wind bias profile that is more representative of conditions at the time of launch. The wind bias profile would be based on a smoothed low-pass (filtered) version of a wind profile measurement taken no earlier than 3-1/2 hours before launch. The minimum time period prior to launch is required for measurement of the wind profile, derivation of the wind bias profile, and revision of the programmed trajectory. This approach is based on the hypothesis that large wavelength perturbations in the wind profile change slowly with time. The results described in Section II of this report support this hypothesis for a large majority of cases (41 out of 50). However, in nine cases, smoothing of the wind profiles to eliminate wavelengths less than 9000 m does not reduce the wind change to the desired insignificant amount.

It is recommended that a study be performed to test the method outlined above for optimizing the wind biasing scheme for the Space Shuttle. The study consisting of three tasks listed below would utilize the VAFB winter Jimsphere pairs data and existing trajectory and loads simulation programs. The tasks are:

1. Wind bias with respect to the monthly mean and calculate loads based on the T-O profile

2. Wind bias with respect to the smoothed T-3.5 hour profile and calculate loads based on the T-0 profile
3. Examine results of 1. and 2. on a case-by-case basis.

There is no need for detailed examination of small loads cases. The ideal outcome in 2. would be the reduction of loads in all cases that had moderate to large loads in 1. An inconclusive outcome in 2. would be little or no change in loads. An unacceptable outcome in 2., which would be the basis for rejection of the proposed scheme, would be an increase of the large loads and an increase in the moderate loads to such a degree that they would fall in the large or critical category.

IX. REFERENCES

1. Smith, O.E.: Vector Wind and Vector Wind Shear Models 0-27 km Altitude for Cape Kennedy, Florida, and Vandenberg AFB, California. NASA TMX-73319, July 1976.
2. Adelfang, S.I.: Analysis of Vector Wind Change with Respect to Time for Vandenberg Air Force Base, California. NASA CR-150776, August 1978.
3. Adelfang, S.I.: Analysis of Wind Bias Change with Respect to Time at Cape Kennedy, Florida, and Vandenberg AFB, California. NASA CR-150777, August 1978.

APPENDIX A

Statistics of Wind Change Within the 3-9 km and 9-16 km Altitude Bands

Page numbers for the various data bases are given in the table below. The numbers within the table represent an abbreviation of the actual page number; for example, 'A-10' is entered as '10' in the table.

PAGE									
LOCATION	SEASON	DT (HOURS)	ALT. (KM)	LOW-PASS UNFILTERED	FILTER 500	CUT-OFF 1500	WAVELENGTH (M) 3000	6000	9000
VAFB	WINTER	3.5	3-9	2	3	4	5	6	7
VAFB	WINTER	3.5	9-16	8	9	10	11	12	13
VAFB	TRANSITION	3.5	3-9	14	15	16	17	18	19
VAFB	TRANSITION	3.5	9-16	20	21	22	23	24	25
VAFB	SUMMER	3.5	3-9	26	27	28	29	30	31
VAFB	SUMMER	3.5	9-16	32	33	34	35	36	37
VAFB	WINTER	7	3-9	38	*	*	*	*	*
VAFB	WINTER	7	9-16	39	*	*	*	*	*
SANTA MONICA	WINTER	6	3-9	40	*	*	*	*	*
SANTA MONICA	WINTER	6	9-16	55	*	*	*	*	*
SANTA MONICA	SUMMER	6	3-9	70	*	*	*	*	*
SANTA MONICA	SUMMER	6	9-16	85	*	*	*	*	*
KSC	WINTER	3.5	3-9	100	102	104	106	108	110
KSC	WINTER	3.5	9-16	112	114	116	118	120	122
KSC	TRANSITION	3.5	3-9	124	125	126	127	128	129
KSC	TRANSITION	3.5	9-16	130	131	132	133	134	135
KSC	SUMMER	3.5	3-9	136	137	138	139	140	141
KSC	SUMMER	3.5	9-16	142	143	144	145	146	147

(*) Not Included

ORIGINAL PAGE IS
OF POOR QUALITY

VAFB, UNFILTERED			WINTER 3HR WIND CHANGE 3-9KM			V-COMPONENT CHANGE			VECTOR WIND CHANGE			MAX
NP	MEAN	STD. DEV.	U-COMPONENT CHANGE	MEAN	STD. DEV.	V-COMPONENT CHANGE	R	MEAN	STD. DEV.	MAX		
1	-97	4.10	-5.53	3.90	1.28	3.90	.016	7.23	3.34	14.02		
2	-59	1.76	1.41	1.28	1.55	1.28	.330	2.07	.98	4.26		
3	84	1.67	1.32	2.55	2.51	2.55	.067	3.10	1.44	5.69		
4	4.91	2.73	1.13	2.51	6.44	2.51	.075	5.60	2.77	13.02		
5	35	3.17	6.2	6.13	6.13	6.13	.660	6.35	3.38	12.75		
6	1.80	3.94	-12.43	4.15	4.15	4.15	.232	13.26	5.91	25.66		
7	3.16	1.83	-4.11	1.97	1.97	1.97	.162	5.89	3.56	15.93		
8	2.26	1.82	-1.16	3.18	3.18	3.18	.543	3.15	1.54	6.94		
9	1.36	1.30	3.71	1.04	1.04	1.04	.232	11.53	4.48	18.55		
10	-2.22	.96	1.91	1.21	1.21	1.21	.438	3.16	.76	4.53		
11	-25	1.40	1.39	2.17	2.17	2.17	.287	2.09	1.02	4.59		
12	1.41	1.06	-3.07	2.76	2.76	2.76	.079	3.71	1.86	7.15		
13	90	3.05	1.49	1.23	1.23	1.23	.465	3.97	2.04	8.03		
14	-2.42	1.09	-1.18	2.54	2.54	2.54	.651	3.06	.75	5.04		
15	-1.19	2.55	-4.4	4.25	4.25	4.25	.716	3.52	1.45	7.31		
16	2.19	1.98	16	7.28	7.28	7.28	.301	4.77	1.98	9.60		
17	5.94	4.14	.89	1.89	1.89	1.89	.468	8.77	5.40	27.76		
18	-11.47	5.34	-6.15	2.93	2.93	2.93	.559	13.25	5.10	19.73		
19	-8.83	2.36	-2.52	1.94	1.94	1.94	.673	9.50	2.89	13.45		
20	-2.52	2.38	1.30	1.58	1.58	1.58	.529	3.80	1.72	8.04		
21	-92	1.32	1.28	6.35	6.35	6.35	.430	2.21	1.35	5.06		
22	-5.34	6.16	-7.78	19.82	19.82	19.82	.864	10.65	7.34	23.56		
23	22.77	22.22	31.55	3.08	3.08	3.08	.861	41.34	26.28	85.39		
24	-2.61	2.50	-2.82	3.23	3.23	3.23	.205	5.06	2.20	10.27		
25	-22	1.81	.98	2.67	2.67	2.67	.151	3.61	1.31	6.37		
26	.44	2.12	.64	1.91	1.91	1.91	.490	3.09	1.64	7.83		
27	-02	4.66	-1.72	1.38	1.38	1.38	.223	4.88	2.10	11.00		
28	1.24	1.76	1.29	2.38	2.38	2.38	.020	2.73	.86	5.53		
29	-3.35	3.37	2.98	1.54	1.54	1.54	.256	5.57	2.46	11.10		
30	5.18	2.82	.87	5.10	5.10	5.10	.171	5.67	2.40	10.33		
31	1.35	5.29	-7.43	1.61	1.61	1.61	.837	9.40	4.75	16.92		
32	-36	3.23	-3.20	2.50	2.50	2.50	.302	4.46	1.87	8.85		
33	-5.11	2.29	6.95	2.56	2.56	2.56	.297	9.00	2.19	13.46		
34	-1.46	3.84	3.72	5.76	5.76	5.76	.065	5.70	2.17	9.89		
35	3.07	2.46	-2.95	5.75	5.75	5.75	.659	6.66	3.59	12.80		
36	-2.67	11.07	.03	7.26	7.26	7.26	.396	11.21	6.05	25.02		
37	-4.44	4.82	-3.36	9.55	9.55	9.55	.921	8.06	6.47	20.17		
38	-7.71	6.65	-25.05	.97	.97	.97	.101	26.90	9.91	38.36		
39	.21	1.06	.88	1.37	1.37	1.37	.204	1.53	.72	3.12		
40	.66	1.50	.75	2.18	2.18	2.18	.275	2.02	1.02	4.38		
41	-30	3.05	.47	2.90	2.90	2.90	.550	3.43	1.59	7.49		
42	-1.13	2.11	.84	1.32	1.32	1.32	.065	3.44	1.72	6.82		
43	.44	3.25	1.42	3.24	3.24	3.24	.323	3.18	2.09	9.61		
44	-42	2.12	4.03	3.62	3.62	3.62	.030	4.80	2.98	15.23		
45	-1.34	3.40	.45	4.54	4.54	4.54	.115	4.60	2.32	11.71		
46	1.40	3.22	1.21	2.75	2.75	2.75	.067	5.44	2.17	11.22		
47	-13	2.80	1.44	1.87	1.87	1.87	.643	3.38	2.45	10.91		
48	.92	3.11	-1.14	5.42	5.42	5.42	.053	3.48	1.78	7.53		
49	-99	4.40	-4.1	2.81	2.81	2.81	.585	5.49	4.43	18.12		
50	-2.53	3.33	3.41				.570	5.84	1.68	8.59		
			MEAN DU(M/S) = -.14									
			MEAN DV(M/S) = .51									
			SD DU(M/S) = 6.73									
			SD DV(M/S) = 8.06									
			R(nu), DV) = .52									
			MEAN W(M/S) = 6.61									
			SD W(M/S) = 8.18									
			SD MEAN(W/S) = 6.55									
			MEAN MAX(W/S) = 13.37									
			SD MAX(W/S) = 12.57									

MEAN DU(M/S) = -.14
 MEAN DV(M/S) = .51
 SD DU(M/S) = 6.73
 SD DV(M/S) = 8.06
 R(DU, DV) = .52
 MEAN W(M/S) = 6.61
 SD W(M/S) = 8.18
 MEAN MAXW(M/S) = 6.55
 SD MAXW(M/S) = 13.37
 MEAN MAXW(M/S) = 12.57

ORIGINAL PAGE IS
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NP	VAFB, WL GT 500M	WINTER 3HR WIND CHANGE 3-9PM			V-COMPONENT CHANGE			VFC TOP WIND CHANGE			MAX
		MEAN	STD. DEV.	R	MEAN	STD. DEV.	R	MEAN	STD. DEV.	R	
1		-5.54	3.92	.012	7.24	3.39		7.24	3.39		13.99
2		-4.12	1.28	.341	2.07	.95		2.07	.95		4.14
3		1.33	2.55	-.069	3.10	1.43		3.10	1.43		5.59
4		1.13	2.49	.037	5.60	2.72		5.60	2.72		12.36
5		.62	6.45	.658	13.27	5.91		13.27	5.91		25.97
6		-12.42	6.15	.234	13.27	5.91		13.27	5.91		25.97
7		-4.12	4.17	.158	5.90	3.58		5.90	3.58		15.86
8		-1.16	1.95	.570	3.12	1.54		3.12	1.54		6.97
9		3.71	3.20	.228	11.55	4.47		11.55	4.47		18.34
10		1.91	1.04	.446	3.16	.76		3.16	.76		4.45
11		-1.39	1.22	.294	2.09	1.02		2.09	1.02		4.62
12		-3.08	2.16	.083	3.72	1.86		3.72	1.86		7.06
13		1.49	2.77	.471	3.96	2.06		3.96	2.06		8.09
14		-1.18	1.22	.667	3.07	.73		3.07	.73		4.92
15		-4.2	2.54	.723	3.50	1.45		3.50	1.45		7.19
16		.301	4.25	.301	4.77	1.98		4.77	1.98		9.63
17		.88	7.30	.466	8.78	5.40		8.78	5.40		27.81
18		-6.16	1.89	.564	13.25	5.11		13.25	5.11		19.88
19		2.52	2.93	.674	9.49	2.89		9.49	2.89		13.47
20		1.30	1.93	.537	3.80	1.71		3.80	1.71		7.96
21		1.28	1.59	.423	2.20	1.37		2.20	1.37		5.04
22		-7.78	6.36	.867	10.64	7.35		10.64	7.35		23.60
23		31.56	19.88	.860	41.37	26.34		41.37	26.34		85.45
24		-2.82	3.07	.201	5.06	2.20		5.06	2.20		10.00
25		.99	3.22	.160	3.60	1.29		3.60	1.29		6.29
26		.63	2.67	.491	3.09	1.65		3.09	1.65		7.62
27		-1.73	1.91	.238	4.87	2.10		4.87	2.10		10.89
28		1.28	1.36	.005	2.71	.81		2.71	.81		5.06
29		-2.98	2.39	.256	5.59	2.46		5.59	2.46		11.22
30		-8.7	1.55	-.182	5.68	2.40		5.68	2.40		10.44
31		-7.43	5.07	-.845	9.40	4.73		9.40	4.73		16.78
32		-3.20	1.61	-.317	4.47	1.89		4.47	1.89		9.02
33		6.95	2.50	.296	9.01	2.19		9.01	2.19		13.33
34		3.72	2.56	.062	5.71	2.17		5.71	2.17		9.74
35		-2.95	5.77	.667	6.67	3.59		6.67	3.59		12.78
36		.02	5.78	.395	11.23	6.09		11.23	6.09		25.06
37		-3.36	7.27	.822	8.05	6.50		8.05	6.50		20.04
38		-25.06	9.56	.097	26.91	9.95		26.91	9.95		38.34
39		.89	.95	.222	1.53	.69		1.53	.69		2.99
40		.75	1.35	.285	1.99	1.02		1.99	1.02		4.11
41		.48	2.17	.565	3.44	1.58		3.44	1.58		7.47
42		.85	2.90	.085	3.43	1.66		3.43	1.66		6.65
43		1.42	1.26	.739	3.18	2.07		3.18	2.07		9.29
44		4.09	3.23	.095	4.80	2.96		4.80	2.96		14.61
45		.46	3.63	.115	4.61	2.34		4.61	2.34		11.61
46		1.21	4.58	.069	5.47	2.19		5.47	2.19		11.14
47		1.43	2.76	.650	3.38	2.45		3.38	2.45		10.59
48		-1.13	1.81	-.052	3.46	1.77		3.46	1.77		7.76
49		.40	5.47	.599	5.50	4.48		5.50	4.48		18.61
50		3.41	2.76	.595	5.82	1.63		5.82	1.63		8.80

MEAN DU(M/S) = -.14
 MEAN DV(M/S) = -.51
 SD DU(M/S) = 6.74
 SD DV(M/S) = 8.07
 R(DU,DV) = .52
 MEAN WM(S) = 6.61
 SD WM(S) = 8.19
 SD MEAN(M/S) = 6.56
 MEAN MAXWM(S) = 13.30
 SD MAXWM(S) = 12.60

ORIGINAL PAGE IS
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VAFB, WL GT 1500M WINTER 3HR WIND CHANGE 3 RPM				U COMPONENT CHANGE			V COMPONENT CHANGE			VECTOR WIND CHANGE			MAX
NP	MEAN	STD. DEV.	MEAN	STD. DEV.	MEAN	STD. DEV.	STD. DEV.	STD. DEV.	MEAN	STD. DEV.	STD. DEV.	MAX	
1	-1.93	3.74	1.50	3.57	0.40	6.86	3.27	3.27	6.86	3.27	3.27	12.34	
2	-1.61	1.53	3.38	1.20	0.94	1.92	1.78	1.78	1.92	1.78	1.78	3.78	
3	1.83	1.38	1.32	2.41	0.23	2.96	1.17	1.17	2.96	1.17	1.17	5.09	
4	4.87	2.09	1.22	2.02	1.73	5.42	2.06	2.06	5.42	2.06	2.06	9.37	
5	1.25	2.91	6.2	6.17	7.13	6.04	3.21	3.21	6.04	3.21	3.21	12.20	
6	1.78	3.42	-12.44	5.53	2.21	13.08	5.40	5.40	13.08	5.40	5.40	22.56	
7	3.11	1.50	-4.04	3.90	1.75	5.68	3.35	3.35	5.68	3.35	3.35	13.43	
8	2.26	1.57	1.16	1.78	6.28	2.97	1.38	1.38	2.97	1.38	1.38	6.28	
9	1.30	11.16	3.73	2.98	2.93	11.36	4.40	4.40	11.36	4.40	4.40	16.77	
10	-2.20	1.87	1.83	1.98	4.40	3.10	7.3	7.3	3.10	7.3	7.3	4.28	
11	-1.22	1.31	1.37	1.01	2.36	1.97	1.88	1.88	1.97	1.88	1.88	3.58	
12	1.42	1.91	-3.08	2.10	0.92	3.67	1.78	1.78	3.67	1.78	1.78	6.88	
13	1.88	2.85	1.50	2.44	5.25	3.58	2.06	2.06	3.58	2.06	2.06	7.47	
14	-2.43	1.00	-1.17	1.13	7.95	3.01	6.3	6.3	3.01	6.3	6.3	4.41	
15	-1.15	2.36	1.41	2.44	3.62	3.28	1.25	1.25	3.28	1.25	1.25	5.89	
16	2.21	1.65	1.19	4.09	3.01	4.63	1.59	1.59	4.63	1.59	1.59	8.16	
17	5.95	4.07	1.02	7.18	5.07	8.51	5.66	5.66	8.51	5.66	5.66	27.40	
18	-11.45	5.30	-6.20	1.75	5.10	13.23	5.06	5.06	13.23	5.06	5.06	19.92	
19	-8.89	2.32	-2.51	2.82	7.02	9.52	2.82	2.82	9.52	2.82	2.82	12.96	
20	-2.49	2.09	1.33	1.74	6.91	3.55	1.66	1.66	3.55	1.66	1.66	7.59	
21	1.92	1.13	1.28	1.55	4.03	2.08	1.35	1.35	2.08	1.35	1.35	4.61	
22	-5.37	5.98	7.84	6.04	9.90	10.41	7.35	7.35	10.41	7.35	7.35	21.98	
23	22.76	21.84	31.43	19.39	9.71	41.09	25.89	25.89	41.09	25.89	25.89	84.79	
24	-2.63	2.22	-2.80	2.91	2.66	4.95	1.89	1.89	4.95	1.89	1.89	9.08	
25	-1.20	1.61	1.01	3.10	1.94	3.49	1.00	1.00	3.49	1.00	1.00	5.08	
26	-1.43	1.96	1.55	2.49	5.07	2.86	1.50	1.50	2.86	1.50	1.50	6.37	
27	-1.04	4.55	-1.75	1.77	1.85	2.45	2.05	2.05	2.45	2.05	2.05	10.51	
28	1.29	1.29	1.30	1.21	2.98	5.27	2.43	2.43	5.27	2.43	2.43	10.47	
29	-3.40	3.03	2.96	2.04	0.92	5.58	2.11	2.11	5.58	2.11	2.11	9.10	
30	5.16	2.56	1.87	1.26	8.94	9.13	4.53	4.53	9.13	4.53	4.53	15.82	
31	1.32	5.03	7.35	4.77	2.20	4.20	1.53	1.53	4.20	1.53	1.53	7.32	
32	-1.37	2.90	-3.11	1.34	3.25	8.94	2.08	2.08	8.94	2.08	2.08	12.73	
33	-5.09	2.13	6.93	2.40	1.08	5.47	2.07	2.07	5.47	2.07	2.07	8.62	
34	-1.45	3.58	3.67	2.43	7.94	6.41	3.35	3.35	6.41	3.35	3.35	11.60	
35	3.03	2.10	-2.91	5.52	3.41	11.36	5.65	5.65	11.36	5.65	5.65	23.35	
36	-2.64	10.91	3.23	5.96	8.40	7.87	6.39	6.39	7.87	6.39	6.39	19.51	
37	-4.45	4.68	3.34	7.07	1.57	26.75	9.64	9.64	26.75	9.64	9.64	37.16	
38	-7.69	6.31	-24.97	9.29	10.3	1.33	2.07	2.07	1.33	2.07	2.07	2.07	
39	1.20	1.96	1.85	1.60	0.47	1.57	1.94	1.94	1.57	1.94	1.94	3.39	
40	1.59	1.22	1.72	1.00	3.27	3.18	1.39	1.39	3.18	1.39	1.39	6.88	
41	-1.25	2.94	-1.54	1.75	7.35	3.05	1.30	1.30	3.05	1.30	1.30	5.64	
42	-1.13	1.78	1.88	2.41	1.05	3.14	1.96	1.96	3.14	1.96	1.96	8.25	
43	1.42	3.22	1.50	1.98	4.22	4.73	2.13	2.13	4.73	2.13	2.13	11.06	
44	-1.42	1.89	4.13	2.47	1.25	4.12	2.37	2.37	4.12	2.37	2.37	10.51	
45	-1.32	3.20	-4.2	3.24	1.50	5.25	2.09	2.09	5.25	2.09	2.09	9.89	
46	1.41	3.04	1.18	4.41	1.00	3.22	2.27	2.27	3.22	2.27	2.27	8.99	
47	-0.09	2.67	1.41	2.54	6.63	1.67	1.77	1.77	1.67	1.77	1.77	9.02	
48	1.89	2.60	-1.17	4.87	1.57	5.13	4.00	4.00	5.13	4.00	4.00	16.29	
49	-1.01	4.18	-4.1	4.87	6.69	5.64	1.55	1.55	5.64	1.55	1.55	8.67	
50	-2.49	3.10	3.44	2.58	6.47								

MEAN DU(M/S) = -1.14
 MEAN DV(M/S) = -1.49
 SD DU(M/S) = 6.60
 SD DV(M/S) = 7.93
 R(DU, DV) = -0.54
 MEAN W(M/S) = 6.42
 SD W(M/S) = 8.10
 SD MEAN(W/S) = 6.56
 MEAN MAX(W/S) = 12.25
 SD MAX(W/S) = 12.53

ORIGINAL PAGE IS
OF POOR QUALITY

VAFB, WL GT 3000M WINTER 3UR WIND CHANGE 3 9PM			U-COMPONENT CHANGE			V-COMPONENT CHANGE			VECTOR WIND CHANGE			MAX
NP	MEAN	STD. DEV.	MEAN	STD. DEV.	P	MEAN	STD. DEV.	P	MEAN	STD. DEV.	MAX	
1	-1.91	2.70	-5.27	2.78	3.92	5.97	2.81	11.03	5.97	2.81	11.03	
2	-1.63	1.24	1.44	1.22	1.76	1.76	1.70	3.58	1.76	1.70	3.58	
3	-1.88	1.26	1.31	2.03	1.16	2.57	1.25	4.89	2.57	1.25	4.89	
4	4.76	1.42	1.25	1.64	6.03	5.17	1.48	8.25	5.17	1.48	8.25	
5	1.28	1.91	1.53	5.27	9.83	4.91	2.77	9.16	4.91	2.77	9.16	
6	1.67	2.41	12.39	4.81	15.2	12.77	4.73	20.44	12.77	4.73	20.44	
7	2.99	1.44	3.88	3.19	2.13	5.27	2.90	10.94	5.27	2.90	10.94	
8	2.20	1.41	1.25	1.46	6.00	2.69	1.33	5.56	2.69	1.33	5.56	
9	1.33	10.34	3.70	2.43	3.99	10.76	3.49	14.67	10.76	3.49	14.67	
10	-2.17	.48	1.96	.89	3.25	3.03	.61	4.06	3.03	.61	4.06	
11	-1.24	1.29	1.24	.86	1.77	1.84	.77	3.16	1.84	.77	3.16	
12	1.35	.77	3.11	2.04	1.80	3.60	1.79	6.36	3.60	1.79	6.36	
13	.92	2.76	1.53	1.98	5.52	3.32	1.33	7.20	3.32	1.33	7.20	
14	-2.43	.82	1.17	.79	6.35	2.86	.60	3.74	2.86	.60	3.74	
15	-1.29	2.37	1.51	2.14	7.53	3.24	1.26	7.26	3.24	1.26	7.26	
16	2.24	1.27	1.13	3.87	4.71	4.32	1.69	7.00	4.32	1.69	7.00	
17	5.99	3.57	1.12	6.51	4.59	7.93	5.41	24.14	7.93	5.41	24.14	
18	-11.61	5.08	-6.26	1.20	8.81	13.30	4.92	19.88	13.30	4.92	19.88	
19	-8.86	2.35	-2.42	2.63	8.45	9.43	2.76	13.18	9.43	2.76	13.18	
20	-2.45	1.74	1.35	1.45	6.52	3.36	1.28	6.00	3.36	1.28	6.00	
21	.83	.66	1.18	1.33	7.75	1.83	.96	3.75	1.83	.96	3.75	
22	-5.28	5.68	-7.69	5.69	9.25	9.94	7.26	20.94	9.94	7.26	20.94	
23	22.41	20.92	31.26	18.43	8.73	40.38	25.00	79.72	40.38	25.00	79.72	
24	-2.45	1.50	-2.71	2.92	6.23	4.62	1.67	7.84	4.62	1.67	7.84	
25	-1.11	1.22	1.03	2.91	15.6	3.10	1.17	4.70	3.10	1.17	4.70	
26	.38	1.62	1.55	1.87	6.01	2.31	1.10	4.53	2.31	1.10	4.53	
27	-1.05	4.30	-1.76	1.42	1.049	4.40	2.05	9.45	4.40	2.05	9.45	
28	1.30	.83	1.35	.99	6.92	2.10	.87	3.28	2.10	.87	3.28	
29	-3.60	2.04	-2.37	1.51	3.23	4.92	2.00	8.08	4.92	2.00	8.08	
30	5.06	2.46	1.86	.86	2.03	5.41	1.96	8.67	5.41	1.96	8.67	
31	1.28	4.64	7.36	4.65	9.64	8.94	4.35	15.30	8.94	4.35	15.30	
32	-2.23	2.32	3.07	.94	1.91	3.77	1.25	6.71	3.77	1.25	6.71	
33	-5.06	1.96	6.93	1.81	3.28	8.84	1.61	10.95	8.84	1.61	10.95	
34	-1.35	2.97	3.83	1.91	2.69	5.02	1.93	8.80	5.02	1.93	8.80	
35	2.93	1.84	2.89	5.23	3.27	6.08	3.26	11.45	6.08	3.26	11.45	
36	-2.27	10.86	.81	5.58	2.38	11.30	5.16	19.47	11.30	5.16	19.47	
37	-4.69	4.41	3.60	6.89	3.20	7.62	6.62	21.37	7.62	6.62	21.37	
38	-7.63	5.88	-24.49	9.27	1.28	26.24	9.48	34.80	26.24	9.48	34.80	
39	.18	.51	.78	.65	3.23	1.07	.41	1.74	1.07	.41	1.74	
40	.74	.68	.62	.94	6.95	1.45	.43	2.22	1.45	.43	2.22	
41	-1.49	2.19	1.45	1.35	9.25	2.33	1.27	5.00	2.33	1.27	5.00	
42	-1.07	1.50	.67	1.93	6.22	2.42	1.32	4.87	2.42	1.32	4.87	
43	.60	2.85	1.46	.82	7.70	2.98	1.55	6.73	2.98	1.55	6.73	
44	-1.43	1.64	3.93	1.94	1.042	4.43	1.57	7.44	4.43	1.57	7.44	
45	-1.42	2.26	2.22	2.22	6.66	2.95	1.83	7.43	2.95	1.83	7.43	
46	1.35	2.42	.93	3.42	1.15	4.16	1.69	6.37	4.16	1.69	6.37	
47	.06	2.04	1.55	1.60	8.41	2.53	1.64	5.42	2.53	1.64	5.42	
48	1.09	2.39	-1.21	1.52	2.92	2.80	1.68	7.03	2.80	1.68	7.03	
49	-1.96	3.76	1.34	3.57	7.35	4.71	2.36	10.61	4.71	2.36	10.61	
50	-2.47	2.87	3.42	2.31	7.37	5.42	1.40	7.97	5.42	1.40	7.97	

MEAN DUWM/S)= 1.15
MEAN DVWM/S)= 1.47
SD DUWM/S)= 6.34
SD DVWM/S)= 7.68
R(DU, DV)= .56
MEAN WIM/S)= 6.04
SD WIM/S)= 7.93
SD MEANW/S)= 6.53
MEAN MAXWIM/S)= 10.86
SD MAXWIM/S)= 11.89

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OF POOR QUALITY

VAFB, WL GT 6000M WINTER 3HR WIND CHANGE 3-9PM			U COMPONENT CHANGE			V COMPONENT CHANGE			VECTOR WIND CHANGE			P		
NP	MEAN	STD.DEV	MEAN	STD.DEV	STD.DEV	MEAN	STD.DEV	STD.DEV	MEAN	STD.DEV	STD.DEV	MEAN	STD.DEV	STD.DEV
1	-75	1.65	4.94	2.40	2.40	5.29	2.34	2.34	5.29	2.34	2.34	5.29	2.34	2.34
2	-40	.54	.48	.66	.66	.92	.52	.52	.92	.52	.52	.92	.52	.52
3	1.09	.56	1.22	1.26	1.26	2.04	.64	.64	2.04	.64	.64	2.04	.64	.64
4	5.02	.75	1.16	.39	.39	4.52	1.75	1.75	4.52	1.75	1.75	4.52	1.75	1.75
5	.55	1.86	.51	4.52	4.52	9.22	2.73	2.73	9.22	2.73	2.73	9.22	2.73	2.73
6	1.70	1.22	-13.72	2.90	2.90	5.65	1.70	1.70	5.65	1.70	1.70	5.65	1.70	1.70
7	3.28	.67	-4.33	2.20	2.20	4.52	2.15	2.15	4.52	2.15	2.15	4.52	2.15	2.15
8	1.93	.81	.37	.74	.74	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
9	1.09	10.09	4.80	2.00	2.00	.40	.40	.40	2.91	.61	.61	2.91	.61	.61
10	-2.05	.67	2.00	1.15	1.15	1.48	1.48	1.48	3.52	1.21	1.21	3.52	1.21	1.21
11	.00	.61	1.15	1.48	1.48	1.57	1.57	1.57	3.24	1.87	1.87	3.24	1.87	1.87
12	1.29	.38	3.14	2.77	2.77	.74	.74	.74	2.83	.53	.53	2.83	.53	.53
13	.86	.73	1.09	2.11	2.11	3.26	3.26	3.26	4.05	.94	.94	4.05	.94	.94
14	-2.45	2.53	.86	9.19	9.19	8.15	8.15	8.15	13.47	4.79	4.79	13.47	4.79	4.79
15	-1.64	.95	.04	2.31	2.31	.60	.60	.60	2.65	.93	.93	2.65	.93	.93
16	2.41	4.47	1.15	1.67	1.67	.87	.87	.87	1.52	.43	.43	1.52	.43	.43
17	5.76	5.13	-6.42	5.45	5.45	16.80	16.80	16.80	10.25	6.40	6.40	10.25	6.40	6.40
18	-11.67	2.41	-2.27	2.65	2.65	2.27	2.27	2.27	40.40	23.52	23.52	40.40	23.52	23.52
19	-9.09	.89	1.67	2.87	2.87	2.65	2.65	2.65	4.41	1.41	1.41	4.41	1.41	1.41
20	-2.02	.30	.99	1.67	1.67	.87	.87	.87	2.43	.76	.76	2.43	.76	.76
21	.85	5.17	-7.77	31.41	31.41	3.26	3.26	3.26	4.69	1.14	1.14	4.69	1.14	1.14
22	-5.42	19.96	31.41	2.80	2.80	2.65	2.65	2.65	2.23	.45	.45	2.23	.45	.45
23	22.84	.70	-2.80	.97	.97	2.27	2.27	2.27	2.23	.45	.45	2.23	.45	.45
24	-2.47	.63	.97	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
25	.04	1.24	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
26	.13	4.27	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
27	-1.10	.69	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
28	1.27	.91	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
29	-3.54	.91	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
30	4.65	2.36	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
31	1.34	3.86	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
32	-.02	2.03	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
33	-5.11	1.42	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
34	-.96	1.30	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
35	2.94	1.70	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
36	-1.60	9.87	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
37	-4.84	4.42	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
38	-7.81	5.81	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
39	.20	.35	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
40	.60	.68	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
41	-.51	1.08	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
42	-1.37	1.29	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
43	.66	1.97	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
44	-.31	.95	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
45	-1.56	1.89	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
46	1.83	.76	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
47	.19	1.10	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
48	.82	.92	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
49	-1.50	1.83	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45
50	-2.74	2.32	1.72	1.72	1.72	.32	.32	.32	2.23	.45	.45	2.23	.45	.45

MEAN DU(M/S) = -13
 MEAN DV(M/S) = -52
 SD DU(M/S) = 6.15
 SD DV(M/S) = 7.63
 R(DU,DV) = .61
 MEAN W(M/S) = 5.77
 SD W(M/S) = 7.94
 SD MEAN(W/S) = 6.78
 MEAN MAX(W/S) = 9.37
 SD MAX(W/S) = 11.46

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OF POOR QUALITY

VAEB, WL GT 9000M , WINTER 70IP WIND CHANGE 3 9/M

NP	U COMPONENT CHANGE		V COMPONENT CHANGE		P	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-1.84	.90	4.64	1.88	5.27	1.92	6.94	
2	-1.31	.23	1.40	.49	8.95	.27	1.12	
3	1.25	.97	1.21	.67	1.27	.73	4.23	
4	5.17	.53	1.40	.20	5.61	.94	5.85	
5	.46	1.67	.41	2.53	5.75	.77	4.25	
6	1.87	.49	14.00	2.66	6.59	2.56	16.39	
7	3.06	.67	1.81	1.81	6.52	1.36	7.23	
8	1.56	.89	.48	.63	3.22	.66	2.56	
9	.42	7.74	1.72	.98	5.43	2.26	12.66	
10	-2.08	.25	2.07	.42	9.33	.46	3.41	
11	.05	.60	1.23	.27	1.77	1.68	1.98	
12	1.33	.11	3.29	1.13	2.95	.79	4.49	
13	1.42	2.55	2.02	1.37	9.28	1.85	6.15	
14	-2.44	.55	1.90	.83	6.65	.30	3.10	
15	-1.91	2.35	1.45	2.97	9.65	2.74	10.30	
16	2.53	.89	2.27	2.28	9.13	.63	4.45	
17	6.51	4.36	2.85	9.65	9.02	6.66	26.24	
18	-12.68	5.49	6.66	1.34	9.76	5.46	23.52	
19	-9.48	3.14	3.13	1.15	8.77	3.25	15.80	
20	-2.03	.38	1.47	1.01	3.70	.46	3.26	
21	1.05	.30	1.00	.51	3.81	.44	2.42	
22	-6.25	4.56	7.97	3.79	9.55	5.56	16.08	
23	24.25	15.11	73.40	14.26	9.92	19.72	64.26	
24	-2.59	.35	2.87	2.07	8.22	1.07	5.77	
25	.00	.36	.88	1.11	12.1	.51	2.05	
26	.19	.77	.70	.67	12.3	.43	1.79	
27	.45	3.26	1.42	1.12	6.11	.72	4.83	
28	1.16	.45	1.77	.72	5.15	.54	3.33	
29	-3.72	.87	2.92	.78	9.22	1.12	6.78	
30	4.18	1.26	1.24	.97	9.95	.82	5.58	
31	1.70	2.94	7.64	2.83	9.92	2.87	11.42	
32	.30	1.45	2.98	1.01	9.71	.90	4.79	
33	-5.03	1.17	6.60	1.32	4.51	.88	9.53	
34	-1.05	.48	3.35	2.72	4.56	1.60	6.05	
35	3.10	1.15	2.96	2.56	9.93	1.92	6.96	
36	-1.05	7.17	1.07	6.2	1.02	3.74	13.33	
37	-4.82	2.73	4.39	5.67	9.92	4.26	13.47	
38	-8.45	4.34	26.12	5.88	8.12	6.71	33.96	
39	.12	.38	.57	.21	9.21	.20	1.34	
40	.50	.45	.78	.44	8.91	.08	1.34	
41	-1.52	.71	.04	.38	5.74	.59	2.20	
42	-1.40	.91	.56	.86	2.12	.71	2.60	
43	.78	1.36	1.53	.44	5.92	.85	3.61	
44	-.24	.37	3.78	.53	6.29	.53	5.03	
45	-1.95	1.51	1.38	.66	9.30	1.59	4.71	
46	2.11	.52	1.20	1.12	5.65	.67	3.36	
47	.18	.58	1.30	.57	9.73	.29	1.88	
48	.86	.50	1.65	1.32	1.98	1.14	4.02	
49	-1.73	1.55	.85	.60	2.20	1.49	5.47	
50	-2.74	1.04	3.70	1.41	9.92	.50	5.83	

MEAN DU(M/S)= -.15
MEAN DV(M/S)= -.49
SD DU(M/S)= 5.82
SD DV(M/S)= 7.57
R(DU,DV)= .66
MEAN WM(S)= 5.53
SD WM(S)= 7.80
MEAN MAXWM(S)= 8.34
SD MAXWM(S)= 10.49

VAFB UNFILTERED WINTER 3HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	2.53	2.50	4.33	2.27	-.478	5.75	1.84	10.55
2	-.49	2.56	.08	2.27	-.416	3.16	1.39	5.57
3	3.59	4.66	3.16	3.63	-.245	6.69	3.58	15.21
4	.86	2.36	-.34	2.53	-.203	3.19	1.62	7.38
5	-4.65	2.69	-3.21	6.74	.518	8.55	3.38	15.51
6	2.23	5.20	-5.48	6.95	.011	9.17	5.10	20.80
7	.97	3.24	.99	3.31	-.585	4.27	2.25	9.02
8	-.13	2.65	.24	2.72	-.294	3.34	1.81	7.65
9	-3.94	6.63	-.99	5.82	-.306	8.60	4.49	18.19
10	-.37	1.74	.14	1.32	-.063	1.96	1.04	4.72
11	.79	2.73	.08	2.41	-.003	3.26	1.80	7.90
12	1.00	2.00	-1.51	2.57	-.226	3.45	1.40	5.88
13	.80	5.31	.48	3.81	.589	5.77	3.17	14.49
14	-1.71	.70	-.17	2.51	.128	2.87	1.22	6.12
15	-3.76	3.77	-5.08	6.57	.590	7.95	5.82	20.54
16	2.19	3.39	-1.18	3.85	.367	5.30	2.08	11.14
17	9.13	6.94	13.48	14.88	.853	17.85	14.68	43.06
18	-15.84	7.92	-6.21	3.30	.661	17.27	8.04	28.02
19	-14.88	3.62	-2.89	2.50	.103	15.36	3.64	22.86
20	-2.62	4.07	-2.48	4.52	.392	5.11	4.89	18.78
21	-1.65	4.51	1.49	3.30	.528	4.89	3.50	14.16
22	-5.27	6.98	-3.13	4.68	.775	8.37	6.17	21.82
23	16.36	11.97	23.90	13.55	.921	29.41	17.34	71.38
24	-.70	3.03	-2.26	3.76	.019	4.92	2.14	9.10
25	2.67	2.40	1.53	2.59	-.214	3.99	2.45	10.63
26	1.01	4.31	1.38	3.80	-.083	5.36	2.68	12.07
27	-1.32	4.21	-.48	5.00	-.236	6.16	2.57	11.34
28	.00	2.27	1.88	3.16	-.440	4.00	1.63	9.08
29	-3.71	2.65	-3.07	3.42	.518	5.61	3.21	11.59
30	8.28	5.96	-2.51	3.31	.474	10.29	3.91	18.53
31	1.61	3.23	-4.52	3.93	-.260	6.46	2.67	13.45
32	-.91	4.20	-3.02	3.60	.457	5.71	2.81	11.18
33	-5.19	3.83	3.58	4.49	-.120	7.68	3.95	15.78
34	-.63	3.81	-4.33	4.56	-.008	6.11	4.13	16.30
35	-.37	3.89	-.43	2.65	.051	4.08	2.40	10.98
36	1.44	8.13	.73	7.73	.171	8.81	7.11	28.27
37	-2.44	6.19	-4.11	7.04	.521	8.77	5.80	22.59
38	-1.35	7.84	-8.72	8.14	.862	11.56	8.46	33.98
39	-.39	1.63	.49	1.47	.272	2.04	1.02	5.55
40	1.42	3.69	1.59	2.59	-.099	4.50	2.14	8.91
41	-.06	2.79	1.15	3.69	-.088	4.29	2.08	10.85
42	.98	3.28	3.07	3.09	.116	4.94	2.50	9.12
43	-.28	3.31	1.68	3.08	.122	4.30	2.19	9.61
44	-2.29	2.50	1.60	2.11	.158	4.07	1.40	7.28
45	-1.81	3.59	-.25	2.21	.300	4.07	2.10	11.64
46	.68	4.76	1.29	2.67	.179	5.03	2.57	11.53
47	1.37	2.56	1.44	2.82	-.059	3.72	2.14	10.33
48	1.10	4.03	-2.19	3.17	-.298	5.03	2.62	11.18
49	-2.23	4.18	-1.81	2.71	.227	5.22	2.39	9.14
50	-3.79	2.95	2.64	2.49	.191	5.44	2.58	11.18

MEAN DU(M/S) = -.44
 MEAN DV(M/S) = .06
 SD DU(M/S) = 6.53
 SD DV(M/S) = 6.80
 R(DU,DV) = .50
 MEAN W(M/S) = 6.67
 SD W(M/S) = 6.68
 SD MEAN(M/S) = 4.75
 MEAN MAXW(M/S) = 15.04
 SD MAXW(M/S) = 11.12

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OF POOR QUALITY

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	2.53	2.48	4.33	2.23	-.491	5.75	1.78	10.24
2	-4.9	2.53	.08	2.22	-.436	3.14	1.30	5.50
3	3.58	4.71	3.15	3.62	-.244	6.70	3.61	14.94
4	.85	2.32	-.35	2.41	-.202	3.07	1.60	6.93
5	-4.65	2.64	-3.21	6.74	.536	8.54	3.36	15.09
6	2.23	5.25	-5.48	6.96	.012	9.21	5.11	20.94
7	.96	3.24	.98	3.34	-.596	4.26	2.31	9.21
8	-12	2.59	.25	2.66	-.317	3.29	1.74	7.40
9	-3.95	6.66	-.99	5.83	-.307	8.62	4.53	18.72
10	-.37	1.74	.14	1.27	.049	1.94	1.01	4.55
11	.78	2.74	.08	2.41	-.003	3.27	1.80	7.52
12	1.00	2.00	-1.51	2.56	-.224	3.44	1.41	5.75
13	.80	5.30	.48	3.74	.612	5.68	3.25	14.43
14	-1.71	.69	-.17	2.50	.114	2.86	1.22	6.12
15	-3.76	3.74	-5.09	6.56	.596	7.93	5.84	20.62
16	2.20	3.40	-1.18	3.81	.370	5.30	2.03	10.77
17	9.13	6.96	13.48	14.91	.854	17.86	14.72	42.90
18	-15.83	7.92	-6.21	3.26	.659	17.27	8.02	28.15
19	-14.88	3.57	-2.90	2.44	.103	15.35	3.60	21.97
20	-2.62	4.07	-2.48	4.56	.391	5.11	4.92	18.64
21	-1.66	4.49	1.49	3.29	.527	4.86	3.50	13.97
22	-5.26	6.98	-3.13	4.66	.783	8.32	6.21	21.84
23	16.35	11.97	23.90	13.53	.921	29.41	17.31	71.66
24	-.70	3.03	-2.27	3.78	.018	4.93	2.16	9.14
25	2.68	2.35	1.53	2.54	-.225	3.98	2.37	10.30
26	1.01	4.32	1.37	3.79	-.089	5.37	2.64	11.73
27	-1.33	4.22	-.48	5.00	-.235	6.18	2.55	11.08
28	.00	2.17	1.88	3.05	-.434	3.91	1.50	7.64
29	-3.71	2.47	-3.07	3.29	.582	5.48	3.17	11.91
30	8.28	5.96	-2.51	3.32	.477	10.30	3.89	18.39
31	1.63	3.17	-4.52	3.90	-.267	6.39	2.72	13.05
32	-.91	4.22	-3.01	3.60	-.468	5.71	2.82	10.84
33	-5.19	3.85	3.58	4.52	-.125	7.69	3.98	15.78
34	-.63	3.79	-4.33	4.58	-.002	6.12	4.12	16.18
35	-.37	3.88	-.43	2.63	.059	4.07	2.39	10.90
36	1.44	8.17	.72	7.78	.176	8.84	7.18	28.06
37	-2.45	6.20	-4.11	7.06	.524	8.78	5.82	22.56
38	-1.36	7.86	-8.71	8.14	.868	11.57	8.47	34.08
39	-.38	1.60	.49	1.44	.306	2.02	.97	5.23
40	1.42	3.65	1.60	2.56	-.110	4.47	2.09	8.24
41	-.06	2.73	1.16	3.70	-.098	4.27	2.04	10.74
42	.98	3.28	3.07	3.11	.114	4.95	2.51	9.03
43	-.28	3.28	1.68	3.07	.114	4.28	2.19	9.27
44	-2.29	2.48	1.60	2.06	.147	4.05	1.33	7.10
45	-1.81	3.59	.26	2.08	.331	4.02	2.08	11.47
46	.69	4.78	1.28	2.68	.183	5.04	2.57	11.67
47	1.38	2.56	1.44	2.81	-.054	3.70	2.17	10.30
48	1.11	4.06	-2.20	3.15	-.303	5.06	2.61	10.92
49	-2.24	4.18	-1.80	2.67	.251	5.22	2.36	9.12
50	-3.80	2.85	2.64	2.46	.181	5.40	2.53	9.97

MEAN DU(M/S) = -.44
 MEAN DV(M/S) = .06
 SD DU(M/S) = 6.53
 SD DV(M/S) = 6.80
 R(DU,DV) = .50
 MEAN W(M/S) = 6.66
 SD W(M/S) = 6.69
 SD MEAN(M/S) = 4.76
 MEAN MAXW(M/S) = 14.85
 SD MAXW(M/S) = 11.22

VAFB, WL GT 1500M, WINTER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	2.47	1.85	4.30	1.48	-.405	5.34	1.30	7.69
2	-.50	2.29	.10	1.85	-.592	2.77	1.11	5.04
3	3.59	4.25	3.14	3.24	.205	6.29	3.43	11.89
4	-.90	1.93	.31	1.51	-.263	2.49	.82	4.07
5	-4.56	2.45	-3.21	6.49	-.598	8.37	3.01	12.93
6	2.28	4.57	-5.43	6.44	.012	4.88	4.88	17.39
7	1.03	2.75	.99	2.88	-.481	3.70	2.04	8.54
8	-.09	2.32	.25	2.33	-.465	2.86	1.62	6.38
9	-3.98	6.31	-1.02	5.20	-.381	8.17	4.10	15.97
10	-.37	1.38	.11	.95	-.200	1.58	.67	3.22
11	.76	2.43	.13	2.14	-.075	2.97	1.50	6.05
12	.97	1.52	-1.53	2.38	-.398	3.15	1.15	4.93
13	.83	4.96	.42	3.22	.809	5.08	3.17	12.85
14	-1.68	.60	-.16	2.32	.071	2.73	1.07	5.42
15	-3.79	3.37	-5.08	6.25	.644	7.72	5.56	19.90
16	2.27	2.91	-1.21	3.33	.433	4.90	1.48	7.64
17	9.09	6.65	13.44	14.39	.885	17.44	14.50	42.03
18	-15.83	7.57	-6.21	2.88	.730	17.17	7.75	26.81
19	-14.81	3.27	-2.94	1.80	.057	15.21	3.24	20.59
20	-2.59	3.80	-2.51	3.97	.450	4.72	4.58	15.71
21	-1.66	4.22	1.51	2.91	.524	4.43	3.41	12.18
22	-5.11	6.56	-3.12	3.98	.908	7.50	6.20	20.88
23	16.33	11.61	23.92	13.45	.948	29.26	17.27	69.59
24	-.73	2.51	-2.33	3.51	.075	4.68	1.62	7.96
25	2.62	1.55	1.54	1.86	-.035	3.54	1.58	6.79
26	1.02	3.23	1.35	2.85	-.211	4.36	1.54	7.52
27	-1.32	3.88	-.51	4.81	-.223	5.89	2.31	11.01
28	-.04	1.50	1.90	2.51	-.350	3.27	1.22	5.64
29	-3.73	1.97	-3.00	3.02	.759	5.16	3.05	11.32
30	8.26	5.59	-2.52	2.43	.637	9.98	3.48	16.07
31	1.66	2.55	-4.52	3.56	-.330	5.85	2.85	11.59
32	-.82	3.77	-3.03	3.10	-.558	5.40	2.12	9.36
33	-5.18	3.05	-3.66	3.76	-.255	7.21	3.42	12.43
34	-.58	3.19	-4.33	4.19	-.018	5.59	3.94	13.65
35	-.38	2.88	-.44	1.90	-.127	3.15	1.51	7.32
36	1.44	7.62	.58	6.54	.189	7.91	6.36	25.27
37	-2.36	5.67	-4.06	6.85	.555	8.35	5.58	22.06
38	-1.32	7.49	-8.75	7.98	.888	11.30	8.39	32.95
39	-.32	1.34	.52	1.09	.566	1.66	.76	3.26
40	1.43	2.91	1.60	1.97	-.410	3.80	1.56	6.04
41	-.09	2.39	1.19	3.29	-.118	3.93	1.56	8.14
42	.98	2.76	3.03	2.65	.231	4.57	1.94	8.85
43	-.30	2.97	1.68	2.86	.109	3.98	2.00	8.07
44	-2.27	2.25	1.60	1.79	.047	3.81	1.20	6.08
45	-1.77	3.46	.21	1.42	.569	3.65	1.94	10.36
46	.63	4.55	1.27	2.30	.178	4.63	2.55	11.25
47	1.40	2.23	1.45	2.20	.002	3.27	1.77	8.85
48	1.13	3.69	-2.12	2.89	-.274	4.75	2.26	10.32
49	-2.14	3.98	-1.72	2.29	-.364	4.79	2.38	8.25
50	-3.83	2.42	2.63	2.27	.079	5.22	2.29	8.63

MEAN DU(M/S) = -.42
 MEAN DV(M/S) = .06
 SD DU(M/S) = 6.26
 SD DV(M/S) = 6.54
 R(DU,DV) = .54
 MEAN W(M/S) = 6.24
 SD W(M/S) = 6.58
 SD MEAN(W/S) = 4.81
 MEAN MAXW(M/S) = 13.13
 SD MAXW(M/S) = 11.20

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NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		VECTOR WIND CHANGE		R	STD. DEV.	MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.	MEAN	STD. DEV.			
1	2.43	1.13	4.13	1.15	4.90	1.24	.107		6.42
2	-48	2.11	.06	1.41	5.12	2.91	-.692		4.11
3	3.50	2.56	3.15	2.43	5.12	2.91	-.490		10.96
4	1.10	1.20	.31	.95	1.81	.60	-.253		3.59
5	-4.53	2.27	-3.33	5.61	7.58	3.27	.616		12.59
6	2.16	2.73	-5.29	5.77	7.23	4.59	.232		15.63
7	1.14	2.07	1.01	1.68	2.85	1.12	-.173		5.30
8	-08	1.98	.34	1.93	2.45	1.33	-.594		5.05
9	-4.04	5.10	-1.09	3.33	5.87	4.47	-.702		13.84
10	-.42	1.08	.15	.61	1.18	.59	.302		2.37
11	.88	1.11	-.01	1.79	2.07	.94	.026		3.94
12	.96	1.05	-1.47	2.26	2.81	1.16	-.777		4.74
13	.73	4.30	.34	2.68	4.49	2.47	.961		9.03
14	-1.65	.61	-.09	2.01	2.54	.81	.133		4.05
15	-3.69	2.84	-5.01	5.75	7.40	5.00	.670		15.42
16	2.28	1.35	-1.10	2.66	3.80	.90	.636		5.43
17	9.21	5.99	13.27	14.01	17.20	14.05	.922		40.71
18	-15.68	7.30	-6.25	2.13	16.94	7.48	.928		26.31
19	-14.67	3.12	-2.83	1.53	15.04	3.03	.028		19.43
20	-2.51	3.16	-2.54	2.51	4.36	3.16	.629		10.67
21	-1.68	4.05	1.58	2.69	4.28	3.25	.531		11.81
22	-5.15	5.85	-3.32	3.50	6.83	6.12	.961		17.60
23	16.47	11.30	23.89	13.52	29.17	17.37	.972		69.17
24	-.85	1.52	-2.25	2.09	3.18	1.52	.378		7.58
25	2.49	1.27	1.57	1.66	3.31	1.44	.148		5.51
26	.94	1.61	1.45	1.30	2.62	.61	-.670		3.79
27	-1.18	3.20	-.48	4.13	2.80	.98	-.282		9.37
28	-.02	.81	1.90	2.13	2.80	.98	.602		4.21
29	-3.66	1.56	-2.94	2.84	4.96	2.83	.862		9.96
30	8.42	5.25	-2.47	1.52	9.82	3.21	.896		14.37
31	1.56	2.46	-4.44	3.06	5.37	2.95	.406		10.43
32	-.65	2.65	-3.00	2.06	4.32	1.42	-.642		7.04
33	-5.09	1.82	3.71	2.38	6.54	2.42	-.676		10.82
34	-.60	2.42	-4.47	2.78	5.17	2.69	-.382		10.66
35	-.35	2.11	-.47	.95	1.98	1.33	-.615		4.68
36	1.03	6.10	.36	4.53	6.64	3.84	-.064		16.96
37	-2.01	4.14	-3.86	5.57	6.26	5.28	.464		21.36
38	-1.40	7.08	-8.89	7.41	10.61	8.56	.894		31.33
39	-.30	1.00	.50	.75	1.29	.47	.516		2.38
40	1.34	2.34	1.55	.90	2.99	1.22	-.622		5.33
41	.03	1.73	1.11	2.28	2.93	.90	.019		4.31
42	.92	2.16	3.09	1.65	4.06	1.12	.410		6.67
43	-.33	2.51	1.72	2.49	3.63	1.52	.280		6.15
44	-2.23	2.04	1.68	1.44	3.60	1.02	.070		5.71
45	-1.61	2.92	.07	1.19	2.82	2.14	.805		7.35
46	.60	3.76	1.41	1.63	3.89	2.00	.116		8.11
47	1.41	1.49	1.39	1.68	2.79	1.07	-.470		5.22
48	.74	1.51	-2.06	2.04	3.00	1.47	.078		6.97
49	-2.11	3.85	-1.75	1.81	4.24	2.76	.483		8.91
50	-3.78	2.21	2.60	1.50	4.87	2.11	-.228		8.10

MEAN DU(M/S) = -.41
 MEAN DV(M/S) = .06
 SD DU(M/S) = 5.87
 SD DV(M/S) = 6.17
 R(DU, DV) = .59
 MEAN W(M/S) = 5.54
 SD W(M/S) = 6.48
 SD MEAN(M/S) = 4.90
 MEAN MAXW(M/S) = 11.23
 SD MAXW(M/S) = 11.23

VAFB, WL GT 6000M, WINTER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	2.34	1.27	4.03	1.32	-.946	4.70	1.70	6.80
2	-.59	1.23	.12	.56	-.379	1.29	.72	2.67
3	3.68	1.79	3.40	1.51	.853	5.11	2.13	8.50
4	1.10	1.02	.42	.72	.144	1.51	.81	3.52
5	-4.69	2.03	-3.66	3.58	-.829	6.37	3.42	11.31
6	2.38	1.03	-4.97	5.16	-.144	6.40	4.13	15.33
7	1.34	.86	1.13	.79	-.146	1.92	.86	4.18
8	-.24	1.40	.04	1.60	-.728	2.03	.66	3.42
9	-4.22	4.52	-1.72	1.76	-.704	5.36	3.94	13.61
10	-.61	.53	.09	.45	-.221	.86	.33	1.51
11	.88	.49	-.16	1.32	-.283	1.53	.65	2.59
12	1.15	.54	-1.74	2.17	-.758	2.77	1.30	4.45
13	.87	3.66	.40	2.18	-.984	3.78	2.17	7.42
14	-1.56	.82	-.09	1.35	.037	2.07	.82	3.16
15	-3.58	2.61	-5.16	4.77	.882	6.87	4.67	13.30
16	2.18	1.46	-1.00	2.22	.638	3.52	.65	5.36
17	9.63	5.42	12.94	11.49	-.986	16.51	12.20	34.64
18	-16.49	6.92	-6.23	2.27	-.978	17.64	7.24	26.14
19	-15.21	1.92	-2.76	1.07	.623	15.49	1.98	18.31
20	-2.79	1.75	-2.66	1.40	.927	3.88	2.20	7.57
21	-1.84	3.97	1.72	1.81	.575	4.39	2.46	8.89
22	-5.58	5.77	-3.46	4.29	-.989	7.54	6.16	17.34
23	17.62	12.65	24.83	14.70	-.986	30.53	19.27	67.06
24	-.81	1.11	-2.34	1.30	.714	2.68	1.36	5.94
25	2.60	.77	1.82	1.18	.447	3.28	1.13	4.99
26	.91	.95	1.77	.64	-.729	2.26	2.86	2.86
27	-1.16	2.44	-.41	2.71	-.855	3.40	1.80	6.85
28	.15	.65	1.85	2.06	-.302	2.72	.85	4.01
29	-3.95	1.35	-3.10	2.34	-.967	5.16	2.42	8.65
30	9.27	4.43	-2.36	.78	-.937	9.95	3.59	13.80
31	1.53	2.88	-4.98	2.95	-.917	5.82	3.21	11.07
32	-.68	1.75	-2.91	1.12	-.404	3.44	1.19	6.08
33	-5.49	.59	3.93	1.32	-.495	6.82	1.05	8.28
34	-.78	1.08	-4.54	1.74	-.689	4.81	1.51	7.23
35	-.03	1.80	-.67	1.45	-.902	2.05	1.26	5.63
36	1.06	5.59	.37	1.73	-.761	5.08	3.10	12.85
37	-1.83	2.17	-3.91	4.82	-.380	5.12	4.51	16.75
38	-1.15	5.82	-8.99	7.52	-.975	10.23	8.23	31.24
39	-.30	.82	.64	.36	.585	1.11	.27	1.58
40	1.55	1.50	1.57	.62	-.389	2.65	.72	3.82
41	.33	1.03	.97	1.08	-.450	1.70	.59	2.62
42	1.03	1.25	3.39	.94	-.041	3.81	.67	4.66
43	-.20	1.85	1.87	2.11	-.926	3.21	1.05	4.64
44	-2.47	1.05	1.59	.85	.803	3.22	.28	3.65
45	-1.47	2.47	-.03	.95	-.959	2.71	1.35	5.49
46	.09	2.04	1.44	1.21	-.274	2.55	1.10	4.68
47	1.33	.85	1.63	.85	-.043	2.29	.81	3.36
48	.70	1.69	-1.98	2.92	-.791	3.65	1.56	9.42
49	-1.93	3.07	-1.50	.60	-.471	3.44	1.99	6.58
50	-3.72	1.71	2.72	1.50	-.538	4.73	2.00	6.82

MEAN DU(M/S) = -.39
 MEAN DV(M/S) = .07
 SD DU(M/S) = 5.86
 SD DV(M/S) = 6.00
 R(DU,DV) = .64
 MEAN W(M/S) = 5.20
 SD W(M/S) = 6.59
 SD MEAN(M/S) = 5.17
 MEAN MAXW(M/S) = 9.81
 SD MAXW(M/S) = 10.88

ORIGINAL PAGE IS
OF POOR QUALITY

VAFB, WL GT 9000M, WINTER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	2.19	.79	3.61	1.17	.975	4.23	1.40	5.85
2	-67	.60	-26	.31	-.247	.83	.53	1.74
3	3.39	1.87	3.31	.90	.947	4.86	1.75	7.20
4	1.25	.83	3.32	.86	.676	1.56	.80	3.64
5	-4.71	1.23	-3.39	1.40	.775	5.85	1.70	8.16
6	2.46	.54	-5.61	4.65	.443	6.63	3.92	14.94
7	1.83	.74	.76	.25	.025	2.01	.70	3.90
8	.08	1.19	.37	.50	.153	1.17	.65	2.93
9	-4.37	2.71	-1.49	1.26	-.760	4.96	2.36	9.72
10	-.73	.44	.11	.54	-.677	.92	.44	1.68
11	.82	.42	-.17	.96	-.184	1.27	.44	1.97
12	1.24	.30	-1.88	1.96	-.872	2.63	1.45	4.49
13	.67	2.50	.42	1.51	.986	2.57	1.59	6.01
14	-1.56	1.02	-.15	.65	.169	1.81	.79	2.67
15	-3.36	2.51	-4.92	3.16	.911	6.18	3.69	11.28
16	2.14	1.51	-.88	1.39	.740	3.00	.72	4.25
17	9.71	3.83	12.29	6.97	.990	15.73	7.83	27.78
18	-16.86	5.19	-6.87	1.32	.858	18.25	5.20	24.91
19	-15.32	1.88	-2.83	1.11	.971	15.60	2.02	17.69
20	-3.27	.85	-2.66	.40	.819	4.23	.87	5.66
21	-2.05	3.37	1.75	1.34	.719	4.24	1.54	6.87
22	-5.40	5.04	-3.89	3.78	.989	7.28	5.56	16.08
23	18.54	10.98	25.81	12.96	.998	31.83	16.90	60.25
24	-1.00	.76	-2.62	.61	.585	2.88	.74	4.92
25	2.73	.83	1.70	.70	.170	3.28	.87	4.31
26	-.92	.53	1.49	.59	-.762	1.90	.31	2.36
27	-1.07	1.59	-.68	1.46	-.852	2.34	.87	4.62
28	-.20	1.20	1.93	1.53	.751	2.53	1.07	3.77
29	-4.00	1.18	-3.19	1.43	.888	5.15	1.76	7.52
30	9.68	3.12	-2.33	.51	.794	10.07	2.79	12.63
31	1.24	3.03	-5.29	2.93	-.973	6.24	2.88	10.55
32	-1.59	.88	-3.06	.92	-.294	3.23	.93	4.67
33	-5.91	1.29	4.26	.68	-.706	7.30	.58	8.29
34	-1.25	1.30	-4.26	.84	-.882	4.68	.42	5.21
35	-.05	1.83	-.93	1.43	-.992	2.27	1.04	4.80
36	1.48	3.27	4.28	1.08	-.860	3.07	2.21	8.36
37	-2.26	.71	-4.28	2.85	.479	4.99	2.68	12.05
38	-1.51	3.69	-10.45	6.55	.981	10.85	7.07	27.81
39	-.25	.50	.82	.32	.789	1.02	.21	1.61
40	1.67	.72	1.62	.34	.144	2.39	.54	3.06
41	-.34	.76	-.814	.85	-.144	1.36	.64	2.33
42	.96	1.23	3.46	.61	-.274	3.82	.38	4.20
43	-.21	1.74	1.69	1.71	.980	2.82	.93	4.09
44	-2.55	.83	1.60	.68	.917	3.18	.30	3.68
45	-1.36	1.95	-.01	.65	.969	2.14	1.23	4.62
46	.07	1.03	1.66	.70	-.004	1.99	.60	3.00
47	1.36	.69	1.67	.43	.123	2.23	.57	2.68
48	1.36	2.57	-1.11	.41	.982	4.58	2.35	11.85
49	-1.74	2.08	-1.46	.46	.668	2.65	1.65	5.55
50	-3.56	1.31	2.84	1.49	-.884	4.59	1.90	6.64

MEAN DU(M/S) = -.39
 MEAN DV(M/S) = .02
 SD DU(M/S) = 5.66
 SD DV(M/S) = 5.74
 R(DU,DV) = .65
 MEAN W(M/S) = 5.02
 SD W(M/S) = 6.32
 SD MEAN(M/S) = 5.40
 MEAN MAXW(M/S) = 8.50
 SD MAXW(M/S) = 9.74

VAFB, UNFILTERED TRANS AIR WIND CHANGE 3-9/11

NP	U COMPONENT CHANGE			V COMPONENT CHANGE			P	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	STD. DEV.	STD. DEV.	MEAN	STD. DEV.				
1	.77	1.67	2.18	1.94	132	2.98	1.73	7.43		
2	1.52	1.79	.21	1.20	198	2.23	1.42	6.51		
3	-1.59	1.97	.86	2.86	159	3.68	1.31	7.57		
4	-0.1	1.40	.07	1.25	474	1.71	1.78	3.48		
5	-2.18	4.65	.11	4.60	706	6.18	3.04	15.20		
6	-12.47	3.84	772	4.36	644	15.04	4.75	22.70		
7	-1.64	1.26	1.95	2.22	591	3.35	1.31	6.26		
8	-1.75	1.32	.02	1.37	063	2.39	1.27	4.46		
9	-1.93	2.39	.48	1.99	109	3.20	1.83	7.91		
10	3.32	2.16	2.94	.95	266	4.82	1.40	6.90		
11	-2.52	2.38	1.30	1.94	529	3.80	1.72	8.04		
12	.21	1.17	2.72	1.61	957	3.04	1.48	6.03		
13	-6.80	4.63	6.32	6.21	671	10.12	6.62	19.01		
14	-1.82	2.97	2.16	2.10	394	3.60	2.87	12.78		
15	9.37	2.56	8.31	8.31	062	14.41	4.71	21.65		
16	-.67	1.24	.52	1.36	034	1.86	1.80	3.29		
17	.94	2.24	2.14	2.28	382	3.54	1.78	6.93		
18	.45	2.87	1.03	1.99	694	2.83	2.32	11.11		
19	.81	2.50	1.39	2.10	267	3.27	1.60	6.42		
20	.70	1.72	2.25	3.75	697	3.52	3.13	18.66		
21	1.62	5.30	4.08	5.63	745	8.55	2.39	17.85		
22	-1.48	3.99	3.21	7.42	419	7.71	4.88	18.43		
23	.70	3.06	1.47	4.83	327	5.60	1.98	9.19		
24	4.38	1.69	2.43	2.19	310	5.51	1.51	8.70		
25	-1.00	1.79	.82	3.11	032	3.40	1.72	6.70		
26	-2.07	1.29	1.90	2.26	240	3.45	1.65	7.07		
27	-3.03	3.60	.33	1.88	191	4.26	2.75	10.29		
28	1.08	1.28	1.93	2.52	336	3.16	1.70	9.41		
29	-.96	.93	.65	1.57	493	1.71	1.34	6.56		
30	-.20	1.73	.48	1.74	296	2.28	1.03	4.76		
31	.02	2.00	2.21	.99	052	3.00	.92	4.70		
32	-1.18	1.85	2.25	2.82	468	3.76	1.92	9.55		
33	1.99	1.69	.27	1.47	348	2.70	1.33	6.04		
34	-.79	2.76	.03	1.34	031	2.66	1.71	8.96		
35	-.77	.93	1.50	1.30	025	2.05	1.08	4.91		
36	-.25	1.61	1.85	2.72	097	3.12	1.93	6.90		
37	-4.12	2.01	15.44	10.84	531	16.53	10.16	38.27		
38	1.91	5.01	3.87	9.24	653	9.27	6.55	26.46		
39	-2.29	2.71	12	1.54	351	3.56	1.52	7.41		
40	-5.66	4.57	.89	3.68	535	6.78	4.60	15.86		
41	.75	2.34	1.71	2.09	471	3.21	1.73	7.13		
42	-1.94	4.15	1.16	2.53	909	4.72	2.52	11.89		
43	2.30	5.75	.20	3.97	150	6.66	3.10	12.74		
44	-2.93	3.54	-6.32	7.40	893	7.25	7.95	28.08		
45	3.97	2.39	1.48	5.25	095	6.79	2.24	14.96		
46	.85	1.92	3.87	1.87	277	4.56	1.46	7.00		
47	4.84	3.40	8.48	4.73	128	10.63	4.03	15.63		
48	-1.49	2.05	4.17	3.19	150	5.27	2.47	9.56		
49	1.16	1.10	.66	2.88	081	2.83	1.82	8.56		
50	-.79	1.54	3.63	3.38	012	4.61	2.52	9.93		
MEAN DU(M/S)= 5.41										
MEAN DV(M/S)= 5.13										
SD DU(M/S)= 4.19										
SD DV(M/S)= 5.39										
R(DU,DV)= .37										
MEAN W(M/S)= 5.02										
SD W(M/S)= 4.63										
SD MEAN(W/S)= 3.40										
MEAN MAX(W/S)=11.12										
SD MAX(W/S)= 7.06										

MEAN DUIM/S) = .41
 MEAN DVIM/S) = .13
 SD DUIM/S) = 4.19
 SD DVIM/S) = 5.39
 R(DU, DV) = .37
 MEAN WIM/S) = 5.02
 SD WIM/S) = 4.63
 SD MEANWIM/S) = 3.40
 MEAN MAXWIM/S) = 11.12
 SD MAXWIM/S) = 7.06

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VAFB, WL GT 500M , TRANS 3HR WIND CHANGE 3-9/M

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		P	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-77	1.67	2.18	1.90	210	2.98	1.68	7.11
2	1.51	1.76	.22	1.18	205	2.21	1.39	6.20
3	-1.58	1.97	-.86	2.87	205	3.69	1.30	7.21
4	-.01	1.39	.07	1.23	406	1.68	.79	3.44
5	-2.19	4.67	.10	4.62	713	6.21	3.04	14.74
6	-12.45	3.83	-7.72	4.38	647	15.03	4.75	22.56
7	-1.65	1.25	1.94	2.22	597	3.34	1.32	6.30
8	-1.75	1.30	.02	1.34	679	2.37	.98	4.44
9	-1.94	2.36	.48	1.96	141	3.19	1.80	7.65
10	3.32	2.16	2.94	.95	263	4.82	1.40	6.82
11	-2.52	2.37	1.30	1.93	537	3.80	1.71	7.96
12	-.22	1.13	2.72	1.61	047	1.02	1.48	5.97
13	-6.80	4.64	6.32	6.22	670	10.12	6.63	19.15
14	-1.82	2.98	-2.15	2.09	407	3.58	2.89	12.64
15	9.37	2.58	8.17	8.31	361	14.41	4.74	21.47
16	-.67	1.24	-.52	1.34	024	1.84	.81	3.35
17	.94	2.25	2.14	2.28	785	3.54	1.77	6.97
18	.45	2.80	1.04	1.96	696	2.79	2.27	11.28
19	.82	2.51	1.38	2.09	271	3.27	1.57	6.39
20	.69	1.72	-2.23	3.57	093	3.50	2.98	17.15
21	1.60	5.28	4.00	5.60	334	8.51	2.28	17.80
22	-1.48	3.95	-3.22	7.31	425	7.75	4.61	17.91
23	.70	3.08	1.47	4.85	224	5.62	2.01	8.98
24	4.38	1.70	2.42	2.18	310	5.52	1.52	8.74
25	-.99	1.79	-.82	3.13	029	3.41	1.73	6.70
26	-2.08	1.29	1.90	2.29	235	3.47	1.66	7.16
27	-3.02	3.60	1.33	1.87	195	4.26	2.75	10.14
28	1.08	1.28	-1.92	2.54	381	3.16	1.71	9.37
29	-.96	.93	.65	1.57	412	1.69	1.35	6.49
30	.19	1.74	.48	1.73	335	2.29	1.01	4.67
31	.02	1.99	.22	.98	655	3.00	.90	4.69
32	-1.17	1.86	2.22	2.85	473	3.78	1.93	9.46
33	2.00	1.70	.27	1.46	365	2.70	1.33	6.14
34	-.79	2.73	.03	1.32	214	2.66	1.65	8.36
35	-.76	.92	1.49	1.28	029	2.04	1.07	4.82
36	-.25	1.63	1.85	2.71	192	3.12	1.94	6.84
37	-4.13	2.03	-1.44	10.87	535	16.54	10.17	37.95
38	1.91	5.05	-3.87	9.30	651	9.31	6.60	26.83
39	-2.29	2.73	-.12	1.55	353	3.58	1.48	7.46
40	-5.66	4.58	.90	3.70	532	6.78	4.64	15.89
41	-.75	2.35	1.71	2.10	470	3.21	1.75	6.98
42	-1.94	4.18	1.16	2.54	697	4.74	2.54	11.66
43	2.32	5.76	-.20	3.98	151	6.66	3.15	12.76
44	-2.94	3.55	-6.32	7.42	906	7.25	7.98	28.03
45	3.97	2.43	1.46	5.20	112	6.82	2.05	13.50
46	.84	1.91	3.88	1.88	271	4.56	1.44	7.04
47	4.84	3.44	8.48	4.75	127	10.65	4.01	15.71
48	-1.49	2.06	4.17	3.19	144	5.28	2.47	9.59
49	1.16	1.09	.66	2.91	679	2.84	1.83	8.56
50	-.80	1.52	-3.63	3.39	639	4.62	2.51	9.81

MEAN DU(M/S) = -.41
 MEAN DV(M/S) = -.13
 SD DU(M/S) = 4.19
 SD DV(M/S) = 5.38
 R(DU, DV) = -.37
 MEAN WM(S) = 5.02
 SD WM(S) = 4.63
 SD MEAN(M/S) = 3.41
 MEAN MAXWM(S) = 10.98
 SD MAXWM(S) = 7.00

VAFB, WL GT 1500M , TRANS 3HR WIND CHANGE 3.9KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	1.79	1.58	1.56	1.79	1.79	2.75	1.65	6.34
2	1.57	1.60	.90	1.093	1.093	2.06	1.27	6.38
3	-1.55	1.66	2.64	1.82	1.82	3.36	1.23	5.93
4	1.00	1.22	1.11	1.571	1.571	1.48	1.72	2.94
5	-2.15	4.33	4.30	1.740	1.740	5.97	2.47	12.01
6	-12.47	3.57	4.05	6.94	6.94	14.90	4.60	22.28
7	-1.68	1.10	2.04	1.123	1.123	3.19	1.28	6.03
8	-1.73	1.24	1.15	1.148	1.148	2.21	1.98	4.07
9	-1.95	2.10	1.64	2.15	2.15	2.93	1.61	6.52
10	3.29	2.11	.75	1.681	1.681	3.55	1.36	6.65
11	-2.49	2.09	1.74	1.95	1.95	2.82	1.66	7.59
12	.23	.68	1.51	1.51	1.51	9.94	1.45	4.93
13	-6.78	4.48	6.02	6.02	6.02	3.33	6.57	17.39
14	-1.83	2.71	1.56	1.56	1.56	14.29	2.59	10.39
15	9.33	2.45	8.14	8.14	8.14	1.53	4.58	20.78
16	-.64	.88	1.12	1.12	1.12	3.35	1.59	2.65
17	.94	1.98	2.06	2.06	2.06	2.38	1.70	6.82
18	.36	2.12	1.69	1.69	1.69	2.79	1.51	6.64
19	.85	2.35	1.41	1.41	1.41	3.21	1.71	5.78
20	.70	1.48	2.54	2.54	2.54	8.43	3.41	8.28
21	-1.75	5.12	5.85	5.85	5.85	6.76	3.48	29.06
22	-1.38	3.16	4.39	4.39	4.39	5.43	3.48	12.81
23	.68	2.94	4.68	4.68	4.68	5.36	1.87	8.22
24	4.31	1.48	1.95	1.95	1.95	3.19	1.37	8.18
25	-1.00	1.60	2.97	2.97	2.97	3.36	1.62	6.54
26	-2.06	1.10	2.10	2.10	2.10	4.17	1.48	6.46
27	-3.05	3.54	1.66	1.66	1.66	2.86	2.70	9.39
28	1.05	.90	2.28	2.28	2.28	1.53	1.55	7.76
29	-.96	.79	1.39	1.39	1.39	2.06	1.23	5.52
30	.22	1.62	1.52	1.52	1.52	2.74	.95	4.02
31	.03	1.58	.82	.82	.82	2.35	4.25	4.25
32	-1.17	1.67	2.32	2.32	2.32	3.35	1.76	8.08
33	1.94	1.43	1.08	1.08	1.08	2.34	1.26	5.61
34	-.80	2.35	.98	.98	.98	2.50	4.85	4.85
35	-.74	.76	1.08	1.08	1.08	1.90	.96	4.04
36	-.22	1.41	2.51	2.51	2.51	2.87	1.83	5.95
37	-4.12	1.81	10.60	10.60	10.60	16.49	3.33	35.06
38	1.87	4.88	9.05	9.05	9.05	9.15	6.35	24.93
39	-2.34	2.44	1.44	1.44	1.44	3.33	1.55	6.71
40	-5.66	4.40	3.59	3.59	3.59	6.66	4.55	15.23
41	1.78	2.19	1.91	1.91	1.91	3.03	1.65	6.26
42	-1.97	3.84	2.37	2.37	2.37	4.58	2.12	9.31
43	2.30	5.43	3.90	3.90	3.90	6.38	3.05	12.78
44	-2.97	3.34	7.03	7.03	7.03	7.13	7.61	25.43
45	3.90	2.46	4.61	4.61	4.61	6.50	1.47	8.72
46	.82	1.63	1.67	1.67	1.67	10.59	1.28	6.44
47	4.88	3.15	4.70	4.70	4.70	3.92	3.92	14.49
48	-1.55	1.73	2.91	2.91	2.91	5.09	2.40	9.69
49	1.16	.95	2.66	2.66	2.66	2.78	1.41	6.57
50	-.76	1.42	3.05	3.05	3.05	4.52	2.09	8.26

MEAN DU(M/S) = -.41
 MEAN DV(M/S) = -.12
 SD DU(M/S) = 4.04
 SD DV(M/S) = 5.21
 R(DU, DV) = .39
 MEAN W(M/S) = 4.81
 SD W(M/S) = 4.53
 MEAN MAXW(M/S) = 3.43
 SD MAXW(M/S) = 9.82
 MEAN MAXW(M/S) = 7.02

ORIGINAL PAGE IS
OF POOR QUALITY

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	.78	1.34	2.19	1.01	-.367	2.67	1.05	4.30
2	1.67	1.56	.19	.30	-.273	1.90	1.32	5.47
3	-1.50	1.46	-.80	2.39	.446	3.08	1.10	5.28
4	.02	1.00	.09	.93	-.510	1.27	.50	2.12
5	-2.11	3.00	.24	3.93	.859	5.06	1.81	7.66
6	-12.51	3.60	-7.60	3.56	.738	14.79	4.61	23.76
7	-1.83	.94	1.86	1.92	.853	3.19	1.08	5.22
8	-1.72	.86	.05	.77	.385	1.94	.72	3.24
9	-1.98	1.75	.56	1.06	.390	2.60	1.28	5.12
10	3.21	1.97	2.96	.47	-.414	4.68	1.12	6.47
11	-2.45	1.74	1.35	1.45	.662	3.36	1.28	6.00
12	-.13	.55	2.60	1.32	.621	2.69	1.24	4.87
13	-6.64	3.88	-6.21	5.72	.818	9.59	6.20	17.23
14	-2.00	1.93	-2.12	1.30	.788	3.18	1.95	7.02
15	9.24	1.67	8.15	7.72	.498	14.05	4.09	20.08
16	-.66	.50	-.62	.67	.511	1.16	.42	1.93
17	.79	1.63	2.15	1.85	-.750	3.08	1.36	6.38
18	.20	1.57	.98	1.09	.784	1.93	.96	4.18
19	.68	1.65	1.43	.65	.481	2.06	1.19	4.76
20	.73	1.45	-1.85	1.68	-.507	2.54	1.56	4.85
21	2.17	4.67	5.27	6.33	.384	8.65	4.40	24.48
22	-1.27	2.03	-2.93	4.60	.710	5.16	2.96	9.33
23	.47	2.45	1.34	4.14	.293	4.52	2.17	8.10
24	4.13	.87	2.59	1.76	-.129	5.17	.94	6.83
25	-1.20	1.06	.85	2.53	.073	2.74	1.46	5.45
26	-1.98	1.07	1.88	1.26	.860	3.11	.70	5.23
27	-3.18	3.29	-.34	1.41	.162	3.90	2.79	9.48
28	1.04	.57	-1.84	1.84	.900	2.66	1.04	6.17
29	-.99	.69	.61	1.28	.424	1.46	1.16	4.67
30	.28	1.40	.40	1.19	.282	1.73	.77	3.52
31	.03	.94	2.20	.57	.353	2.41	.50	3.19
32	-1.25	1.14	2.35	1.13	.531	2.99	.82	4.89
33	1.83	.89	.41	.74	.148	2.02	.89	4.34
34	-.79	2.05	.03	.65	.290	2.13	.83	3.85
35	-.71	.51	1.46	.64	.152	1.70	.63	3.85
36	-.25	.68	1.59	2.58	.353	2.49	1.86	5.68
37	-3.75	1.55	-15.49	9.78	.676	16.38	9.14	29.44
38	1.38	4.49	-3.72	7.77	.772	8.29	5.23	19.60
39	-2.35	1.65	.15	.96	.614	2.65	1.45	6.41
40	-5.73	3.95	.97	3.15	.579	6.50	4.13	13.29
41	.82	1.71	1.69	1.60	.579	2.64	1.42	4.95
42	-2.04	3.15	1.17	2.00	.907	4.21	1.29	5.74
43	2.19	5.03	.52	3.55	.123	6.00	2.61	10.81
44	-3.06	3.42	6.39	6.60	.078	7.15	7.37	26.99
45	3.95	1.50	1.52	4.00	.322	5.91	1.04	7.52
46	1.00	1.34	3.83	1.37	.706	4.30	.87	5.52
47	4.75	1.71	8.51	4.21	.218	10.10	3.71	13.28
48	-1.28	.77	-4.21	2.62	.546	4.60	2.38	8.88
49	1.13	.69	.68	1.58	.147	2.03	.77	3.38
50	-1.63	1.27	-3.63	2.50	.079	4.16	2.01	7.44

MEAN DU(M/S) = -.43
 MEAN DV(M/S) = -.10
 SD DU(M/S) = 3.77
 SD DV(M/S) = 4.96
 R(DU,DV) = .43
 MEAN WM(S) = 4.45
 SD WM(S) = 4.38
 MEAN MAXWM(S) = 8.37
 SD MAXWM(S) = 6.61

VAFB, WL GT 6000M , TRANS 3HR WIND CHANGE 3-9KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	.91	.54	2.21	1.26	151	2.54	1.07	5.22
2	1.75	1.51	1.16	.48	931	1.87	1.45	4.95
3	-1.53	1.41	-.56	.97	1056	2.14	1.00	4.48
4	-2.05	.58	-.20	.32	1317	.67	.18	.99
5	-2.05	1.63	-.49	2.85	1952	3.77	.99	5.50
6	-13.70	3.40	-7.49	2.93	619	15.74	4.01	25.86
7	-1.68	.82	1.80	1.61	947	2.97	.73	4.11
8	-1.66	.76	.14	.65	748	1.87	.51	2.69
9	-1.91	1.68	.72	1.18	725	2.74	.93	4.17
10	3.15	1.85	2.72	.22	373	4.40	1.20	5.81
11	-2.02	.89	1.67	.60	793	2.65	.99	3.98
12	-.09	.50	-2.57	.90	1378	2.62	.87	3.65
13	-7.00	3.11	5.37	5.37	979	10.11	4.83	15.01
14	-2.02	.91	-2.29	1.45	655	3.12	1.59	6.13
15	9.29	.83	8.47	8.33	579	14.40	4.51	22.21
16	-.75	.29	-.58	.56	727	1.11	.25	1.48
17	-.66	1.29	2.54	1.80	960	3.05	1.57	7.76
18	.36	.61	1.07	.32	143	1.29	.30	1.65
19	.68	1.63	1.31	1.30	925	2.04	1.54	5.20
20	-.96	1.11	-2.10	1.10	838	2.49	1.25	4.22
21	2.20	3.73	6.27	4.04	859	7.75	3.77	12.94
22	-1.15	.58	-2.67	2.30	472	3.04	2.20	7.45
23	.61	1.17	1.73	2.30	793	2.91	1.24	4.71
24	4.24	.60	3.12	.75	365	5.32	.54	6.12
25	-.97	.52	-.47	1.57	482	1.79	.83	3.30
26	-2.14	.57	2.00	1.17	611	3.11	.79	5.11
27	-3.20	3.05	-.51	.45	1060	3.54	2.73	7.71
28	1.03	.88	-1.95	1.47	951	2.57	1.08	5.83
29	-1.05	.31	.93	1.59	646	1.81	1.15	4.58
30	.61	.66	.40	.88	212	1.18	.59	2.25
31	-1.12	.88	2.12	.22	1363	2.29	.32	3.00
32	-1.33	.65	2.30	.76	385	2.71	.84	4.14
33	1.84	1.28	.19	.57	835	2.25	.58	3.35
34	-.88	2.23	.20	.48	700	2.24	1.00	3.44
35	-.79	.42	1.62	.78	877	1.81	.87	3.51
36	-.30	.33	1.55	1.93	143	2.13	1.34	4.31
37	-4.08	1.35	-15.67	9.37	644	16.71	8.50	27.52
38	1.84	2.14	-3.93	5.84	276	6.77	3.38	12.70
39	-2.83	1.67	-.28	.71	947	2.89	1.73	6.55
40	-5.74	2.94	-.46	2.53	748	6.46	2.54	10.35
41	.95	1.51	1.83	.68	1053	2.45	1.00	3.78
42	-2.12	2.88	1.10	1.79	989	4.01	1.05	5.84
43	1.92	2.83	-.60	2.81	649	4.09	1.77	6.77
44	-3.31	3.35	-6.93	6.55	983	7.72	7.31	22.08
45	3.99	1.24	1.70	1.96	358	4.81	1.03	6.21
46	.77	.99	4.10	.90	655	4.32	.76	5.19
47	4.89	.85	8.60	3.83	753	10.09	3.40	13.46
48	-1.78	2.13	-4.39	1.45	1097	5.11	1.71	8.94
49	1.06	.11	-.45	.79	117	1.36	.34	2.10
50	-.40	1.05	-3.68	1.95	861	3.96	1.73	6.49

MEAN DU(M/S) = -.46
 MEAN DV(M/S) = -.03
 SD DU(M/S) = 3.64
 SD DV(M/S) = 4.73
 R(DU,DV) = .53
 MEAN W(M/S) = 4.18
 SD W(M/S) = 4.29
 MEAN MAXW(M/S) = 3.60
 SD MAXW(M/S) = 7.10
 MEAN MAXW(M/S) = 6.01

VAFB, WL GT 9000M , TRANS 3HR WIND CHANGE 3-9KM

NP	U-COMPONENT CHANGE			V-COMPONENT CHANGE			VECTOR WIND CHANGE			MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.	MEAN	STD. DEV.	MEAN	STD. DEV.	STD. DEV.	
1	.95	.19	2.50	1.32	-.010	1.22	2.73	1.22	1.22	4.87
2	1.96	1.48	.21	.54	.956	1.46	2.05	1.46	1.46	4.67
3	-1.49	1.19	-.70	.42	.254	.86	1.89	.86	.86	3.44
4	-.14	.34	.21	.17	.412	.20	.41	.20	.20	.80
5	-2.40	1.08	-.28	1.68	-.972	.55	3.08	.55	.55	4.03
6	-15.19	3.64	-8.11	2.57	.974	4.39	17.23	4.39	4.39	24.84
7	-1.90	1.27	1.68	1.28	.926	4.72	3.03	.72	.72	4.72
8	-1.66	.37	.15	.21	.785	.34	1.68	.34	.34	2.20
9	-1.84	1.11	.91	1.03	.961	.53	2.49	.53	.53	3.42
10	3.01	1.23	2.67	.08	-.718	.77	4.14	.77	.77	5.09
11	-2.03	.38	1.47	1.01	.370	.46	2.69	.46	.46	3.26
12	-.09	.29	-2.41	.74	.644	.72	2.43	.72	.72	3.06
13	-7.30	2.45	-6.44	3.58	.985	4.02	9.87	4.02	4.02	13.64
14	-2.18	.77	-2.54	1.60	.845	1.65	3.41	1.65	1.65	5.93
15	9.43	.73	9.39	6.82	.928	4.65	14.23	4.65	4.65	20.90
16	-.85	.06	-.45	.30	.406	.11	1.01	.11	.11	1.16
17	.39	1.22	2.77	2.28	-.988	1.86	3.32	1.86	1.86	7.88
18	.33	.39	1.02	.18	-.152	.19	1.14	.19	.19	1.82
19	.75	1.22	1.61	1.07	.930	1.26	2.05	1.26	1.26	4.08
20	1.30	1.44	-2.30	1.16	-.978	1.06	3.04	1.06	1.06	4.45
21	2.06	2.15	5.64	2.10	.950	2.12	6.37	2.12	2.12	8.62
22	-.98	.30	-2.49	1.76	.809	1.62	2.79	1.62	1.62	5.87
23	.82	.52	1.60	1.41	.261	1.01	2.11	1.01	1.01	3.47
24	4.22	.39	2.88	.81	.116	.48	5.16	.48	.48	5.84
25	-.97	.25	-.33	.49	.485	.29	1.12	.29	.29	1.56
26	-1.99	.39	2.09	.18	.570	.20	2.91	.20	.20	3.17
27	-3.54	2.55	-.44	.18	.412	2.42	3.66	2.42	2.42	6.91
28	.83	.77	-2.36	1.55	.993	5.83	2.74	1.31	1.31	5.83
29	-1.11	.13	1.04	.76	.600	.54	1.62	.54	.54	2.54
30	.71	.39	.30	.42	.141	.36	.90	.36	.36	1.69
31	-.28	.70	2.25	.12	.051	.17	2.36	.17	.17	2.59
32	-1.44	.49	2.26	.39	.645	.55	2.70	.55	.55	3.42
33	1.49	1.92	.30	.29	.977	.92	2.28	.92	.92	3.35
34	-.63	1.79	-.23	.17	.923	.81	1.74	.81	.81	2.74
35	-.91	.46	1.72	.74	.963	.86	1.95	.86	.86	3.38
36	-.28	.28	1.43	1.25	.903	.87	1.74	.87	.87	2.94
37	-3.83	1.39	-16.23	6.90	.626	6.29	16.98	6.29	6.29	23.83
38	1.91	1.25	-3.22	3.68	.600	5.02	5.02	1.96	1.96	7.79
39	-2.94	1.48	-.19	.68	.974	3.03	3.03	1.46	1.46	5.28
40	-5.51	1.65	1.77	1.75	.394	1.49	5.86	1.49	1.49	7.88
41	1.12	1.13	1.77	.32	.515	.67	2.31	.67	.67	3.36
42	-1.84	2.09	1.14	1.16	.959	.90	3.09	.90	.90	4.63
43	2.03	1.61	1.06	1.56	.741	1.13	2.99	1.13	1.13	4.71
44	-3.70	3.05	-7.82	5.91	.998	6.65	8.66	6.65	6.65	18.88
45	4.14	1.38	1.57	.94	.744	4.49	4.49	1.50	1.50	7.23
46	1.04	1.09	4.28	.21	.563	4.53	4.53	.32	.32	5.52
47	4.97	1.00	8.67	2.81	.991	10.02	10.02	2.89	2.89	13.31
48	-2.17	1.90	-4.50	.91	.812	5.19	5.19	1.57	1.57	8.61
49	1.08	.17	-.48	.78	.859	1.35	1.35	.47	.47	2.45
50	-.23	.95	-3.45	1.63	.951	1.31	3.71	1.31	1.31	5.31

MEAN DU(W/S) = -.50
 MEAN DV(W/S) = -.05
 SD DU(W/S) = 3.67
 SD DV(W/S) = 4.49
 R(DU,DV) = .60
 MEAN W(W/S) = 4.03
 SD W(W/S) = 4.20
 MEAN M(W/S) = 3.72
 SD M(W/S) = 6.14
 MEAN MAXW(W/S) = 5.47

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VAFB UNFILTERED TRANS 3HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	-1.05	2.91	3.74	3.72	.080	5.36	2.94	12.64
2	3.14	2.68	2.49	2.76	-.457	5.20	1.94	8.63
3	.29	2.20	1.61	1.61	-.536	2.37	1.39	6.81
4	1.61	2.14	-.91	1.67	-.284	2.73	1.71	6.49
5	.51	3.45	-.67	3.75	-.009	4.60	2.42	9.26
6	-14.33	9.91	-7.23	4.35	-.636	16.53	10.08	38.19
7	-4.60	3.11	.20	2.54	-.047	5.57	2.51	10.66
8	-.11	3.36	-.84	2.98	-.300	4.01	2.17	8.87
9	-.48	1.86	1.24	2.39	-.387	3.00	1.39	5.61
10	5.19	1.77	4.03	1.95	-.206	6.79	2.00	10.26
11	-2.62	4.07	-2.48	4.52	-.392	5.11	4.89	18.78
12	.41	1.84	-.89	2.54	-.171	3.08	1.14	5.28
13	-4.21	3.91	-2.49	3.92	-.628	6.27	3.90	14.67
14	-1.30	2.34	-3.58	3.24	-.209	5.00	2.32	10.94
15	6.20	5.29	7.82	7.69	-.564	11.38	7.55	23.16
16	.37	2.15	-.14	2.77	-.083	2.94	1.95	7.94
17	-1.02	2.89	6.73	3.07	-.222	7.39	3.06	12.18
18	.80	6.18	3.19	5.00	-.879	5.80	6.34	41.82
19	-.29	2.46	2.19	3.06	-.379	4.05	1.97	8.27
20	-11.96	4.85	6.28	3.25	-.752	13.65	5.50	23.44
21	-.08	5.82	1.82	16.86	-.605	11.91	13.39	59.47
22	-.03	3.64	1.96	5.96	-.193	5.65	4.53	22.96
23	-1.24	7.28	-.22	4.76	-.029	7.91	3.82	15.30
24	3.46	2.18	-.15	4.41	-.234	5.58	2.23	10.66
25	-2.06	2.76	-2.73	4.29	-.162	5.17	3.30	11.24
26	-1.61	1.05	3.29	2.63	-.194	4.09	2.16	8.75
27	-3.10	3.22	-.32	2.41	-.019	4.54	2.30	10.43
28	-.67	2.14	-2.82	4.03	-.241	4.92	2.22	10.10
29	-.16	1.80	-.39	2.35	-.108	2.35	1.22	4.60
30	.93	2.67	-.41	2.35	-.160	3.34	1.57	8.22
31	.58	2.36	1.91	2.21	-.019	3.42	1.63	7.02
32	-.21	2.48	3.14	2.04	-.121	4.08	1.89	7.28
33	-3.20	4.90	1.22	3.49	-.370	5.47	4.23	13.61
34	1.95	2.88	.64	2.66	-.510	3.49	2.72	17.48
35	.22	1.69	1.45	2.37	-.576	2.80	1.67	8.26
36	-.67	2.90	-3.54	2.92	-.329	4.79	2.64	9.32
37	.94	4.20	7.08	7.90	-.091	9.08	6.96	24.78
38	2.35	7.95	-2.21	6.59	-.061	9.68	4.80	21.48
39	-4.03	4.67	-3.23	3.69	-.014	7.40	2.70	13.52
40	-4.13	5.02	.91	5.98	-.657	6.54	5.99	23.09
41	-.28	2.80	3.45	2.20	-.269	4.61	1.83	8.41
42	-2.00	6.89	2.02	3.63	-.607	5.20	6.45	28.11
43	-2.99	3.05	-6.42	3.36	-.203	7.79	3.16	13.06
44	-8.11	4.76	-9.80	7.32	-.345	13.51	7.45	30.63
45	2.60	3.98	3.98	3.81	-.206	6.76	2.68	16.96
46	2.23	3.37	2.94	2.48	-.367	5.05	2.36	9.35
47	2.78	4.09	9.27	3.51	-.154	10.63	3.10	16.30
48	-3.34	6.47	-4.91	4.99	-.040	9.08	4.40	18.58
49	1.11	1.77	-2.22	2.39	-.021	3.27	2.09	7.85
50	2.28	2.28	1.11	1.51	-.167	3.36	1.61	6.97

MEAN DU(M/S) = -.80
 MEAN DV(M/S) = .22
 SD DU(M/S) = 5.40
 SD DV(M/S) = 5.87
 R(DU,DV) = .25
 MEAN W(M/S) = 6.05
 SD W(M/S) = 5.27
 SD MEAN(M/S) = 3.18
 MEAN MAXW(M/S) = 14.95
 SD MAXW(M/S) = 10.46

VAFB, WL GT 500M, TRANS 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE			V-COMPONENT CHANGE			R	VECTOR WIND CHANGE			MAX
	MEAN	STD.DEV.		MEAN	STD.DEV.			MEAN	STD.DEV.		
1	-1.06	2.79	3.73	3.69	2.75	.063		5.26	2.97	12.52	
2	3.14	2.66	2.49	2.75	1.54	-.455		5.17	1.97	8.67	
3	.29	2.12	-.16	1.54	1.63	.538		2.29	1.31	6.18	
4	1.63	2.12	-.67	1.63	3.68	-.303		2.69	1.73	6.44	
5	.52	3.44	-.91	3.68	4.34	-.012		4.54	2.39	9.03	
6	-14.33	9.94	-.724	4.34	2.54	.644		16.51	10.13	38.29	
7	-4.60	3.10	.20	2.54	2.97	.047		5.55	2.53	10.35	
8	-.11	3.35	-.84	2.97	2.31	-.310		4.00	2.16	9.13	
9	-.49	1.68	1.24	2.31	1.94	.452		2.81	1.43	5.59	
10	5.19	1.73	4.03	1.94	4.56	.217		6.78	1.98	9.93	
11	-2.62	4.07	-2.48	4.56	2.54	.391		5.11	4.92	18.64	
12	.41	1.80	-.90	2.54	3.89	-.181		3.05	1.16	5.09	
13	-4.22	3.87	-2.49	3.89	3.20	.646		6.23	3.90	14.56	
14	-1.31	2.32	-3.58	3.20	7.67	.222		4.98	2.29	10.56	
15	6.20	5.26	7.82	7.67	2.74	.565		11.32	7.60	23.19	
16	.37	2.10	-.14	2.74	3.04	.099		2.87	1.95	7.80	
17	-1.02	2.88	6.74	3.04	4.69	-.219		7.39	3.05	12.20	
18	.81	5.81	3.18	4.69	3.05	.870		5.75	5.78	33.76	
19	-.28	2.42	2.19	3.05	3.24	.382		4.02	1.96	8.17	
20	-11.96	4.85	6.29	3.24	16.76	-.758		13.65	5.50	23.43	
21	-.07	5.79	1.87	16.76	5.94	.604		11.93	13.23	59.65	
22	-.03	3.61	1.96	5.94	4.82	-.199		5.65	4.49	22.58	
23	-1.24	7.39	-.21	4.82	4.43	-.025		8.01	3.86	15.50	
24	3.46	2.16	-.15	4.43	4.28	-.229		5.57	2.27	10.85	
25	-2.05	2.76	-2.73	4.28	2.63	.172		5.15	3.32	11.39	
26	-1.61	.99	3.30	2.63	2.29	-.226		4.08	2.18	8.74	
27	-3.10	3.20	-.32	2.39	4.02	-.015		4.50	2.31	10.41	
28	-.67	2.15	-2.82	4.02	1.85	.237		4.92	2.22	10.15	
29	-.16	1.77	-.39	1.85	2.20	-.128		2.30	1.19	4.53	
30	.93	2.68	-.40	2.29	2.03	-.152		3.34	1.49	7.76	
31	.58	2.31	1.90	2.20	3.50	-.025		3.40	1.60	6.67	
32	-.21	2.48	3.14	2.03	2.66	-.127		4.06	1.91	7.44	
33	-3.20	4.91	1.22	3.50	2.66	-.374		5.48	4.24	13.35	
34	1.95	2.87	.64	2.66	2.36	.513		3.49	2.71	16.61	
35	-.22	1.68	1.46	2.36	2.93	-.586		2.79	1.66	7.94	
36	-.68	2.89	-3.55	2.93	7.92	.342		4.79	2.64	9.40	
37	.93	4.23	-7.07	7.92	6.61	-.095		9.10	6.98	24.66	
38	2.35	8.00	-2.22	6.61	3.36	.061		9.72	4.85	21.44	
39	-4.04	4.70	-3.23	3.70	3.73	-.009		7.41	2.74	13.73	
40	-4.13	4.98	.92	3.50	5.97	-.658		6.50	6.00	23.26	
41	-.27	2.79	3.45	2.17	2.48	.277		4.60	1.82	8.34	
42	-2.00	6.92	2.02	3.61	3.36	-.611		5.23	6.45	27.61	
43	-3.01	3.01	-6.42	3.36	7.33	.208		7.79	3.16	12.92	
44	-8.10	4.76	-9.80	7.33	3.45	.345		13.51	7.45	30.55	
45	2.61	3.98	3.98	3.74	2.48	.204		6.76	2.60	15.65	
46	2.24	3.37	2.93	3.73	3.52	.373		5.03	2.41	9.17	
47	2.78	4.11	9.27	3.52	4.95	-.160		10.63	3.14	16.06	
48	-3.35	6.46	-4.92	4.95	-2.22	-.041		9.05	4.41	18.98	
49	1.11	1.72	-2.22	2.38	1.47	-.018		3.22	2.09	7.67	
50	2.28	2.26	1.11	1.47	1.83	.183		3.32	1.63	6.76	

MEAN DU(M/S) = -.80
 MEAN DV(M/S) = .22
 SD DU(M/S) = 5.39
 SD DV(M/S) = 5.85
 R(DU,DV) = .25
 MEAN W(M/S) = 6.03
 SD W(M/S) = 5.26
 SD MEAN(M/S) = 3.19
 MEAN MAXW(M/S) = 14.67
 SD MAXW(M/S) = 10.14

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VAFB, WL GT 1500M, TRANS 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	-1.13	1.76	3.12	1.95	-.011	4.61	2.50	9.06
2	3.16	2.11	1.95	1.95	-.343	4.68	1.61	6.77
3	.30	1.77	1.29	1.99	-.511	1.99	.96	4.21
4	1.65	1.82	1.40	1.40	-.509	2.31	1.76	6.12
5	.44	3.04	2.93	2.93	-.197	3.87	1.88	7.62
6	-14.35	9.63	4.08	4.08	-.691	16.41	9.94	38.05
7	-4.58	2.89	2.18	2.18	-.145	5.32	2.42	9.49
8	-.07	3.05	2.65	2.65	-.318	3.79	1.62	6.94
9	-.53	1.21	1.97	1.97	-.687	2.16	1.56	5.26
10	5.18	1.52	1.83	1.83	-.242	6.72	1.82	8.91
11	-2.59	3.80	3.97	3.97	-.450	4.72	4.58	15.71
12	.44	1.43	2.33	2.33	-.286	2.76	.93	4.64
13	-4.28	3.59	3.55	3.55	-.771	5.85	3.98	13.74
14	-1.36	1.90	2.86	2.86	-.263	4.63	2.29	8.91
15	6.20	5.04	7.46	7.46	-.591	11.11	7.62	22.37
16	.33	1.41	1.93	1.93	-.166	2.12	1.16	4.80
17	-1.02	2.53	2.71	2.71	-.430	7.25	2.74	11.92
18	.87	4.34	3.91	3.91	-.843	5.22	4.15	18.73
19	-.32	2.10	2.59	2.59	-.469	3.60	1.70	6.72
20	-12.00	4.43	2.88	2.88	-.907	13.61	5.13	20.42
21	-.22	4.37	13.49	13.49	-.526	10.40	9.76	38.82
22	-.08	3.16	5.01	5.01	-.135	5.25	3.32	15.46
23	-1.25	6.86	4.28	4.28	-.066	7.33	3.61	13.25
24	3.46	1.28	4.03	4.03	-.325	5.01	2.17	10.36
25	-2.07	2.41	3.86	3.86	-.209	4.76	3.14	10.86
26	-1.56	.64	2.42	2.42	-.294	3.86	2.14	8.33
27	-3.07	2.99	1.89	1.89	-.011	4.10	2.28	9.51
28	-.66	1.83	3.78	3.78	-.319	4.53	2.32	8.51
29	-.16	1.52	1.47	1.47	-.244	1.98	.85	3.82
30	.99	2.48	2.00	2.00	-.190	3.12	1.22	6.09
31	.58	1.96	1.98	1.98	-.049	3.09	1.47	5.57
32	-.23	2.27	1.95	1.95	-.390	4.00	1.75	7.05
33	-3.21	4.68	3.16	3.16	-.130	5.08	4.21	12.50
34	2.06	2.52	2.37	2.37	-.567	3.12	2.63	13.91
35	-.20	1.49	2.21	2.21	-.705	2.58	1.58	6.87
36	-.70	2.58	2.62	2.62	-.311	4.62	2.28	8.57
37	.93	3.72	7.64	7.64	-.169	8.56	7.01	23.39
38	2.33	7.52	5.97	5.97	-.072	9.10	4.43	17.03
39	-4.05	3.95	2.53	2.53	-.044	6.64	2.04	9.81
40	-4.12	3.85	5.39	5.39	-.804	5.70	5.40	21.04
41	-.27	2.40	1.78	1.78	-.317	4.30	1.55	8.33
42	-1.95	6.31	2.93	2.93	-.618	4.66	5.87	24.80
43	-3.00	2.53	2.71	2.71	-.218	7.42	2.78	11.19
44	-8.04	4.31	7.11	7.11	-.418	13.34	7.23	29.23
45	2.64	3.47	3.12	3.12	-.308	6.11	2.59	11.44
46	2.31	3.10	2.33	2.33	-.410	4.80	2.36	8.62
47	2.62	3.71	3.02	3.02	-.164	10.31	2.74	13.97
48	-3.35	5.95	4.19	4.19	-.055	8.05	4.86	18.17
49	1.09	1.30	2.04	2.04	-.076	2.94	1.82	6.83
50	2.24	2.01	1.29	1.29	-.298	3.10	1.51	6.43

MEAN DU(M/S) = -.80
 MEAN DV(M/S) = -.21
 SD DU(M/S) = 5.08
 SD DV(M/S) = 5.41
 R(DU, DV) = .26
 MEAN W(M/S) = 5.61
 SD W(M/S) = 4.93
 MEAN MAXW(M/S) = 3.18
 SD MAXW(M/S) = 12.40
 MEAN MAXW(M/S) = 7.95

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-1.12	1.32	3.77	2.36	.095	4.36	1.95	8.24
2	3.13	1.74	2.42	1.26	-.419	4.36	1.12	5.63
3	1.38	1.17	-.19	.88	-.662	1.38	.64	2.41
4	1.59	1.69	-.69	1.01	-.668	2.06	1.62	5.05
5	1.44	1.73	-.65	1.85	-.102	2.39	1.13	5.55
6	-14.39	8.67	-7.09	3.46	.751	16.29	8.89	32.93
7	-4.49	2.71	.30	1.83	.167	4.99	2.46	9.28
8	-13	2.21	-.76	1.86	-.505	2.84	.92	4.32
9	5.17	1.05	1.24	1.78	.783	1.94	1.51	5.06
10	-2.51	3.16	3.92	1.65	.320	6.62	1.64	9.08
11	3.7	1.24	-2.54	2.51	.629	4.36	3.16	10.67
12	-4.36	3.34	-.96	1.59	-.011	2.03	1.00	3.88
13	-1.19	1.35	-2.46	3.38	.893	5.70	3.89	11.51
14	6.15	4.83	-3.60	2.51	.421	4.05	2.45	8.06
15	33	1.01	7.83	7.26	.635	10.97	7.39	21.25
16	85	1.92	-.02	1.10	-.109	1.45	.48	2.19
17	1.02	2.95	6.67	2.46	-.771	7.00	2.42	11.26
18	31	2.09	3.21	2.89	.797	4.51	2.82	10.90
19	-11.87	4.20	2.09	2.31	.603	3.40	1.61	6.00
20	52	2.39	6.25	2.57	-.983	13.43	4.88	19.02
21	17	1.68	1.00	10.41	.408	8.63	6.38	24.56
22	1.01	3.84	1.90	1.93	.256	4.14	2.30	9.79
23	3.44	.68	-.20	3.37	-.534	3.80	2.30	9.34
24	-2.01	1.74	-2.59	3.76	-.757	4.62	1.52	7.49
25	1.56	.46	3.08	2.10	.163	4.60	2.59	8.42
26	3.16	2.58	-.29	1.25	-.468	3.60	1.89	6.54
27	64	1.50	-2.81	3.55	.039	3.71	2.13	9.36
28	13	1.17	-.34	1.19	.551	4.13	2.47	8.08
29	88	2.18	-.29	1.83	-.630	1.46	.88	3.28
30	57	1.75	1.87	1.66	-.197	2.82	1.01	4.59
31	31	1.91	3.22	1.38	.045	2.89	1.14	5.07
32	3.28	4.50	1.20	2.85	.060	3.79	1.27	5.82
33	2.27	2.24	-.79	2.16	-.446	5.34	3.46	11.49
34	16	1.36	1.38	1.97	.711	3.06	2.46	12.29
35	71	2.28	-3.47	1.71	-.735	2.42	1.34	5.29
36	64	2.52	-6.93	.081	.429	4.09	1.99	8.20
37	2.78	5.71	-2.20	5.46	.143	7.92	6.40	25.78
38	4.06	3.47	-3.09	1.43	-.341	7.70	3.93	14.30
39	-4.12	3.45	.91	4.75	-.832	5.95	2.17	8.91
40	22	2.29	3.54	1.25	-.147	5.35	4.87	18.77
41	2.06	5.79	2.01	2.35	-.674	4.21	1.26	6.75
42	-2.98	2.30	-6.08	2.09	.543	4.64	5.07	19.04
43	-8.00	3.71	-9.82	6.65	.467	13.20	2.60	10.78
44	2.63	2.76	3.85	2.72	.520	5.34	6.65	28.06
45	2.25	1.98	2.93	1.90	.572	3.89	2.86	9.64
46	2.34	3.04	9.07	2.61	.166	9.87	2.46	7.71
47	-3.54	5.17	-4.89	2.94	-.183	7.62	2.51	12.22
48	1.08	.83	-2.16	1.60	.125	2.60	3.70	15.24
49	2 20	1.52	1.06	1.16	.469	2.72	1.49	5.65
50								5.78

MEAN DU(M/S) = -.81
 MEAN DV(M/S) = .22
 SD DU(M/S) = 4.65
 SD DV(M/S) = 4.93
 R(DU, DV) = .29
 MEAN W(M/S) = 5.10
 SD W(M/S) = 4.53
 MEAN MAXW(M/S) = 3.18
 SD MAXW(M/S) = 10.41
 MEAN MAXW(M/S) = 6.79

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VAFB, WL GT 6000M, TRANS 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-1.97	1.26	3.83	1.56	-.050	4.21	1.39	6.27
2	3.43	1.22	2.46	.61	-.697	4.37	.75	5.46
3	-1.34	1.05	-1.17	.54	.880	1.18	.39	1.75
4	1.62	1.16	-7.1	.67	-.915	1.81	1.29	3.92
5	-14.12	1.79	-7.73	.97	-.270	2.10	.56	3.89
6	-4.85	6.51	-7.25	2.92	.889	15.95	6.96	28.17
7	-4.85	1.80	.28	1.03	.058	4.96	1.79	7.66
8	-1.13	.82	-65	.71	-.360	1.03	.74	2.34
9	-1.69	.54	1.11	1.23	.898	1.64	.90	3.49
10	5.21	1.05	4.06	1.26	.742	6.65	1.48	8.72
11	-2.79	1.75	-2.66	1.40	.927	3.88	2.20	7.57
12	-4.3	.92	-99	1.02	.766	1.61	.67	2.58
13	-4.51	3.73	-2.60	3.98	.935	6.16	4.34	13.58
14	-1.31	1.10	-3.67	1.75	.922	3.96	1.94	6.89
15	6.41	4.60	8.08	7.12	.826	10.82	7.81	22.37
16	.42	.68	-.06	.81	-.189	1.11	.23	1.60
17	-.84	1.67	6.68	2.23	-.942	6.94	2.22	9.46
18	-.76	1.08	3.07	1.44	.503	3.31	1.50	6.42
19	-.52	1.62	1.94	1.65	.856	2.79	1.26	5.28
20	-12.27	4.72	6.53	2.73	-.980	13.92	5.41	18.77
21	-.26	.99	.09	3.83	.688	3.30	2.19	10.88
22	-.23	1.27	2.03	1.27	.568	2.50	1.05	5.09
23	-1.27	1.75	-.24	.92	-.684	2.16	.94	3.77
24	3.55	.34	-.65	1.97	-.726	4.06	.73	5.57
25	-2.09	1.06	-3.04	2.54	.297	4.03	2.21	7.07
26	-1.61	.31	3.25	1.01	-.293	3.65	.95	5.40
27	-3.50	2.37	-.21	.78	-.337	3.72	2.16	7.60
28	-.45	.85	-2.79	3.30	.823	3.75	2.35	6.89
29	-.05	.82	-.32	.94	-.827	1.12	.62	2.33
30	-.95	.61	-.30	1.49	-.038	2.45	.96	4.11
31	-1.73	1.28	1.91	1.05	.714	3.57	.93	4.87
32	-3.69	1.23	3.30	1.07	-.159	4.41	2.66	8.43
33	2.63	2.64	1.67	1.78	-.323	3.31	2.66	11.53
34	2.63	2.36	.83	2.21	.930	2.05	.73	3.57
35	-.02	1.15	1.34	1.28	-.838	3.86	1.68	6.56
36	-.78	2.08	-3.36	1.21	-.263	7.74	6.69	22.95
37	.83	.98	-7.35	7.00	-.420	5.16	1.83	7.82
38	2.58	2.66	-2.36	3.27	.478	5.05	1.13	6.64
39	-3.54	1.64	-3.21	1.12	-.993	6.13	3.76	14.23
40	-4.63	2.99	.68	4.57	-.738	3.91	.94	5.32
41	-.28	1.74	3.52	.84	-.870	3.95	3.97	12.53
42	-2.13	4.46	2.05	1.63	.889	6.72	2.06	9.27
43	-2.81	1.42	-6.05	1.70	-.264	13.17	4.40	22.15
44	-8.10	1.61	-9.77	5.38	.699	5.37	2.56	8.42
45	2.74	2.71	3.79	2.48	.930	3.86	1.98	6.36
46	2.45	1.59	2.92	1.33	.818	9.96	2.88	12.78
47	2.11	2.68	9.40	2.76	-.106	6.22	2.69	10.14
48	-3.03	2.50	-4.98	2.38	-.289	2.66	.91	3.98
49	1.04	.43	-2.41	.90	.583	2.48	.87	3.70
50	2.05	.59	1.17	1.00				

MEAN DU(M/S) = -.82
 MEAN DV(M/S) = .19
 SD DU(M/S) = 4.23
 SD DV(M/S) = 4.50
 R(DU,DV) = .33
 MEAN W(M/S) = 4.61
 SD W(M/S) = 4.20
 SD MEAN(M/S) = 3.27
 MEAN MAXW(M/S) = 8.18
 SD MAXW(M/S) = 5.90

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VAFB, WL GT 9000M, TRANS 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	-1.79	.89	3.53	1.72	-.688	3.81	1.51	5.51
2	3.47	.81	2.23	.54	-.108	4.17	.71	4.84
3	1.44	.42	-.19	.35	-.906	.70	.21	.96
4	1.72	.67	-.56	.56	-.736	1.86	.75	2.97
5	-.06	1.12	-.78	.75	-.177	1.44	.61	3.13
6	-14.44	3.87	-7.18	2.82	.782	16.22	4.44	24.87
7	-4.92	.97	.34	.39	-.009	4.94	.97	6.42
8	-.01	.81	-.54	.42	-.158	1.01	.31	1.73
9	-6.33	.21	1.15	.62	.690	1.37	.52	2.66
10	5.36	.84	4.16	.80	-.904	6.79	1.13	8.21
11	-3.27	.85	-2.66	.40	.819	4.23	.87	5.66
12	-.39	.69	-1.17	.48	.820	1.47	.29	1.92
13	-4.79	3.38	-3.07	3.17	.968	5.80	4.49	13.11
14	-1.39	.99	-3.61	1.44	.957	3.90	1.68	6.20
15	6.44	4.27	8.30	5.56	-.965	10.56	6.92	20.90
16	-.43	.42	-.24	.64	-.455	.86	.28	1.37
17	-.73	1.15	6.52	2.04	-.930	6.65	2.09	8.87
18	.78	.52	3.07	.86	.554	3.19	.91	4.85
19	-.84	1.65	1.82	1.36	-.988	2.81	.85	4.71
20	-12.63	4.42	6.54	2.37	-.979	14.23	4.99	18.82
21	-.10	.31	.58	1.59	.085	1.45	.92	4.84
22	-.50	1.12	1.95	.64	.611	2.33	.56	3.34
23	-1.32	1.01	-.04	.21	-.886	1.55	.63	2.38
24	3.74	.41	-.46	1.08	-.799	3.90	.53	4.75
25	-2.10	.70	-3.03	1.68	-.367	3.83	1.48	5.88
26	-1.59	.49	3.43	.97	.779	3.86	.77	5.10
27	-3.42	2.29	-.14	.31	-.684	3.54	2.12	6.65
28	-.25	.52	-2.54	2.62	-.924	3.04	2.10	6.02
29	-.11	.52	-.21	.86	-.943	.93	.44	1.94
30	.95	.34	-.25	.82	-.299	1.30	.27	1.69
31	-.81	.99	2.05	.76	-.512	2.37	.89	3.91
32	-.19	.74	3.46	.74	-.850	3.56	.62	4.46
33	-3.73	1.28	1.99	1.80	-.547	4.41	1.82	8.40
34	3.15	2.56	1.16	2.23	-.992	3.65	3.08	10.89
35	-.07	.77	1.29	1.16	-.783	1.71	.84	3.37
36	-.92	1.71	-3.20	1.31	-.793	3.62	1.60	5.57
37	.57	.47	-8.11	6.39	.321	8.31	6.17	20.16
38	2.50	2.07	-2.44	1.31	.058	3.96	1.59	6.25
39	-3.42	.98	-3.28	.89	-.380	4.87	.66	5.75
40	-5.24	1.95	.75	3.86	-.996	6.41	2.36	10.70
41	-.25	1.45	3.57	.62	-.684	3.87	.58	4.53
42	-2.24	3.46	2.18	1.03	-.972	3.90	2.76	8.80
43	-2.44	.64	-5.62	1.20	-.861	6.14	1.32	7.66
44	-8.10	.45	-9.74	4.12	-.382	13.00	2.93	18.76
45	2.74	2.40	3.41	2.69	-.873	4.92	2.80	8.26
46	2.35	1.12	2.93	1.24	-.954	3.77	1.66	5.87
47	2.11	2.52	9.65	3.06	.913	10.12	3.31	13.46
48	-2.90	1.30	-4.98	2.14	.515	5.86	2.27	8.88
49	1.01	.33	-2.37	.66	-.658	2.59	.70	3.56
50	1.90	.23	.88	.41	-.308	2.12	.31	2.44

MEAN DU(M/S) = -.85
 MEAN DV(M/S) = .21
 SD DU(M/S) = 4.08
 SD DV(M/S) = 4.29
 R(DU,DV) = .35
 MEAN W(M/S) = 4.42
 SD W(M/S) = 4.04
 SD MEAN(W(M/S)) = 3.39
 MEAN MAXW(M/S) = 7.04
 SD MAXW(M/S) = 5.45

VAFB, UNFILTERED SUMMER 3HR WIND CHANGE 3 9PM

NP	U COMPONENT CHANGE		V-COMPONENT CHANGE		P	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	1.15	1.24	3.23	1.10	.108	3.61	1.22	6.94
2	1.11	1.11	-2.70	.97	.364	3.36	1.01	6.08
3	1.29	1.95	.54	1.24	.400	2.36	1.31	5.23
4	-37	1.59	.41	.98	.164	1.73	.88	4.15
5	-39	.79	.06	1.59	.195	1.63	.81	3.93
6	.79	2.23	1.29	1.22	.024	2.60	1.41	6.02
7	-1.70	1.15	.02	1.18	.342	2.10	1.09	3.90
8	.61	1.85	.27	2.52	.833	2.82	1.49	6.63
9	1.57	2.02	-.33	3.43	.395	3.76	2.07	9.37
10	2.63	3.33	.23	2.30	.066	4.24	2.35	10.20
11	1.05	2.37	3.13	2.59	.343	4.20	2.35	10.20
12	-39	1.55	-2.26	1.44	.221	2.80	1.37	6.16
13	-67	2.20	2.33	2.42	.673	3.50	2.07	8.37
14	.09	2.03	2.64	2.45	.519	3.55	2.11	11.51
15	.26	2.76	.11	3.69	.523	4.16	1.99	8.50
16	.33	1.42	-.97	3.02	.310	3.00	1.79	7.61
17	.43	1.88	-.31	1.96	.175	2.54	1.08	4.62
18	-1.90	2.52	.04	2.16	.360	3.39	1.77	6.51
19	5.90	2.47	-.43	3.48	.475	7.11	1.59	10.26
20	-2.85	2.48	-1.26	1.88	.471	3.93	1.99	7.63
21	1.20	3.28	1.85	2.52	.449	4.26	1.94	9.52
22	1.54	3.13	.75	2.15	.616	3.72	1.87	7.95
23	.12	.90	.08	.98	.177	1.20	.58	2.41
24	-1.61	1.21	-1.97	1.74	.147	3.01	1.39	6.52
25	.96	1.22	.66	1.39	.404	1.87	1.14	4.40
26	1.95	1.60	3.07	.87	.065	3.90	1.15	5.79
27	-77	.74	-1.89	1.33	.076	2.28	1.14	4.78
28	-1.25	4.07	.42	1.62	.565	2.55	3.80	34.43
29	-4.68	1.32	-.04	2.01	.155	5.08	1.39	7.39
30	-8.01	3.04	-4.27	2.37	.704	9.24	3.48	17.97
31	-1.37	1.22	.06	1.34	.271	2.04	.98	4.05
32	.14	1.39	.02	1.07	.370	1.56	.81	3.54
33	-.19	1.68	.84	2.00	.549	2.36	1.40	6.13
34	-.27	1.61	-.61	1.72	.219	2.29	.86	3.94
35	.67	1.92	.41	5.70	.863	4.55	3.99	11.57
36	.01	1.18	-1.74	1.87	.105	2.55	1.20	5.06
37	1.23	1.25	1.69	1.87	.353	2.77	1.31	5.37
38	-.18	2.12	.90	2.44	.024	3.10	1.29	6.12
39	-1.94	2.64	3.35	4.30	.344	5.76	2.69	9.00
40	-2.30	2.77	-1.05	2.11	.423	3.60	2.35	9.58
41	.27	1.86	.54	3.12	.005	3.06	2.05	9.42
42	.83	2.32	.57	1.70	.055	2.65	1.50	7.17
43	.35	1.30	-.16	.62	.162	1.25	.82	2.93
44	.63	2.43	-.48	1.21	.169	2.64	1.00	4.07
45	-.50	1.59	.96	1.28	.217	2.05	.98	5.09
46	-.47	1.42	.88	1.22	.449	1.89	.96	4.33
47	-.32	1.82	-.39	1.41	.627	2.06	1.14	6.36
48	.07	1.27	.10	1.68	.040	1.85	1.01	4.16
49	-.43	1.66	1.66	.87	.133	2.33	1.00	4.27
50	-.14	.75	.41	2.11	.173	1.90	1.25	5.63

MEAN DUIM/S) = .14
 MEAN DVIM/S) = -.03
 SD DUIM/S) = 2.77
 SD DVIM/S) = 2.66
 R(DU, DV) = .25
 MEAN WIN/S) = 3.11
 SD WIN/S) = 2.25
 MEAN MAXWIN/S) = 1.45
 SD MAXWIN/S) = 7.24
 MEAN MAXWIN/S) = 4.82

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VAFB, WL GT 500M SUMMER AIR WIND CHANGE 3-9KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		P	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	1.16	1.23	3.23	1.08	.207	3.60	1.20	6.83
2	1.11	1.66	-2.70	.88	.449	3.35	.89	5.54
3	1.29	1.95	-.54	.88	.509	2.37	1.29	5.08
4	-.37	1.57	.41	.97	.180	1.71	.88	4.12
5	-.38	.77	.06	1.58	.182	1.61	.81	3.84
6	-.79	2.22	1.30	1.21	.034	2.59	1.41	6.01
7	-1.70	1.14	.02	1.16	.342	2.08	1.09	3.90
8	-.61	1.84	-.28	2.52	.952	2.80	1.52	6.53
9	1.57	2.02	-.33	3.43	.460	3.76	2.05	8.95
10	2.63	3.33	.22	2.29	.064	4.24	2.31	9.35
11	1.05	2.37	3.13	2.59	.256	4.19	2.37	9.96
12	-.39	1.56	-2.25	1.42	.238	2.79	1.38	6.04
13	-.67	2.20	-2.32	2.43	.616	3.50	2.07	8.49
14	-.08	2.04	-2.64	2.48	.535	3.56	2.14	11.70
15	.26	2.75	.12	3.71	.524	.15	2.03	8.45
16	.33	1.42	-.97	3.04	.265	3.01	1.79	7.84
17	.44	1.85	-.32	1.94	.186	2.52	1.05	4.32
18	-1.90	2.52	.05	2.14	.359	3.41	1.71	6.31
19	5.90	2.48	-.42	3.48	.479	7.12	1.57	10.27
20	-2.85	2.49	1.26	1.87	.478	3.92	1.99	7.63
21	1.20	3.28	1.85	2.52	.467	4.27	1.92	9.71
22	1.54	3.14	-.75	2.15	.617	3.72	1.87	8.02
23	.12	.89	.08	.97	.207	1.20	.56	2.45
24	-1.61	1.19	-1.97	1.73	.134	2.99	1.40	6.52
25	.96	1.22	.67	1.40	.404	1.87	1.15	4.36
26	1.94	1.59	3.08	.81	.073	3.90	1.11	5.64
27	-.77	.73	-1.90	1.33	.073	2.28	1.14	4.80
28	-1.24	3.55	.43	1.58	.577	2.49	3.26	27.80
29	-4.68	1.32	-.04	2.02	.162	5.08	1.39	7.20
30	-8.01	3.06	-4.27	2.35	.707	9.23	3.48	18.38
31	-1.37	1.21	-.06	1.34	.282	2.05	.97	4.01
32	.14	1.39	.02	1.06	.371	1.55	.81	3.43
33	-.20	1.67	.84	1.99	.595	2.33	1.42	6.19
34	-.26	1.60	-.51	1.72	.219	2.29	.83	3.70
35	.67	1.91	.41	5.70	.879	4.50	4.04	12.03
36	.01	1.18	-1.74	1.87	.101	2.55	1.19	4.94
37	1.23	1.23	1.69	1.88	.361	2.77	1.30	5.42
38	-.18	2.11	.91	2.44	.026	3.09	1.30	6.16
39	-1.94	2.64	3.35	4.30	.339	5.76	2.68	9.05
40	-2.29	2.79	-1.05	2.12	.423	3.62	2.35	9.75
41	-.27	1.86	-.53	3.15	.930	3.07	2.08	9.41
42	-.83	2.33	.57	1.70	.061	2.67	1.49	7.19
43	.35	1.30	-.16	.58	.155	1.22	.83	3.07
44	.63	2.42	-.48	1.20	.166	2.63	.99	4.12
45	-.50	1.58	.86	1.27	.239	2.04	.97	5.12
46	-.46	1.41	.88	1.21	.461	1.87	.97	4.22
47	-.32	1.81	-.39	1.36	.626	2.05	1.08	5.84
48	-.07	1.27	1.66	1.66	.042	1.83	1.02	4.11
49	-.43	1.62	1.66	.84	.171	2.30	1.01	4.19
50	-.14	.71	.41	2.12	.158	1.89	1.26	5.54

MEAN DU(M/S) = .13
 MEAN DV(M/S) = .03
 SD DU(M/S) = 2.75
 SD DV(M/S) = 2.66
 R(DU,DV) = .26
 MEAN W(M/S) = 3.11
 SD W(M/S) = 2.23
 MEAN MAXW(M/S) = 1.46
 SD MAXW(M/S) = 7.07
 MEAN MAXW(M/S) = 4.15

VAFB, WL GT 1500M . SUMMER 3HP WIND CHANGE 3-0KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		P	VF-TOP WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	1.13	1.09	3.19	.90	.224	3.50	1.04	6.06
2	1.10	1.46	2.67	.71	.611	3.25	.66	4.47
3	1.27	1.73	.54	1.10	.529	2.24	1.04	4.61
4	1.36	1.41	.38	.81	.353	1.50	.81	3.21
5	1.40	.67	.04	1.39	.204	1.43	.69	3.48
6	1.77	1.90	1.27	1.08	.622	2.42	1.06	4.25
7	1.73	.92	.02	.97	.552	2.00	.88	3.09
8	1.61	1.60	.26	2.30	.928	2.40	1.58	5.99
9	1.56	1.87	.33	3.24	.436	3.60	1.87	7.15
10	2.60	3.18	.26	2.19	.082	4.01	2.37	9.38
11	1.08	2.14	3.09	2.47	.443	3.96	2.40	8.79
12	1.35	1.32	-2.28	1.25	.273	2.66	1.24	5.34
13	1.63	2.06	-2.35	2.32	.732	3.43	1.95	7.31
14	.07	2.01	-2.60	2.22	.571	3.47	1.92	10.70
15	.32	2.51	.09	3.55	.623	3.93	1.87	8.05
16	.31	1.18	-.90	2.91	.362	2.87	1.59	6.47
17	.40	1.58	-.34	1.65	.283	2.23	.70	3.51
18	1.86	2.19	.07	1.73	.353	3.13	1.19	5.47
19	5.85	2.20	-.47	3.35	.554	6.97	1.34	9.25
20	-2.83	2.37	-1.23	1.72	.454	3.81	1.90	7.02
21	1.18	3.05	1.83	2.05	.493	3.93	1.65	8.54
22	1.57	2.91	.74	1.97	.701	3.47	1.80	7.52
23	.11	.72	.09	.85	.131	1.05	.41	1.60
24	1.61	.98	-1.96	1.58	.141	2.88	1.28	5.96
25	.96	1.15	.66	1.30	.483	1.78	1.07	4.02
26	1.93	1.20	3.10	.64	.375	3.79	.91	5.38
27	1.76	.60	-1.88	1.23	.662	2.19	1.08	4.27
28	-1.32	2.72	.46	1.32	.646	2.30	2.41	15.00
29	-4.73	1.30	.05	1.69	.119	5.05	1.22	8.07
30	-8.08	3.01	-4.30	2.28	.765	9.27	3.48	18.73
31	-1.35	1.10	-.06	.88	.311	1.81	.74	3.17
32	.15	1.27	.04	.83	.595	1.35	.70	2.30
33	1.18	1.48	.83	1.85	.636	2.14	1.30	4.84
34	1.27	1.36	-.63	1.55	.235	2.12	.52	3.30
35	.64	1.63	-.38	5.21	.931	3.90	3.88	12.26
36	.04	.81	-1.74	1.78	.139	2.29	1.27	4.31
37	1.18	.99	1.70	1.75	.254	2.54	1.37	5.11
38	1.19	1.89	.97	2.22	.067	2.90	1.01	5.13
39	-1.94	2.49	3.37	4.18	.348	5.71	2.48	8.88
40	-2.25	2.65	-1.00	1.93	.462	3.45	2.20	8.52
41	.25	1.72	-.53	2.63	.015	2.67	1.75	7.39
42	.81	1.99	.54	1.46	.165	2.36	1.21	5.13
43	.32	1.20	-.14	.40	.065	1.12	.68	2.57
44	.62	2.29	-.48	.90	.271	2.49	.67	3.47
45	1.55	1.34	.84	.92	.091	1.67	.93	4.46
46	1.49	1.29	.95	1.11	.589	1.77	.95	4.47
47	1.31	1.50	-.38	.85	.501	1.58	.83	3.13
48	.06	1.08	.09	1.01	.157	1.25	.81	3.40
49	1.42	1.43	1.62	.68	.159	2.14	.84	3.68
50	1.13	.47	.41	2.00	.238	1.64	1.30	4.77

MEAN DUIM/S)= -1.14
 MEAN DVIM/S)= -1.01
 SD DUIM/S)= 2.61
 SD DVIM/S)= 2.49
 R(DU, DV)= .27
 MEAN WIM/S)= 2.91
 SD WIM/S)= 2.14
 MEAN MAXWIM/S)= 1.49
 SD MAXWIM/S)= 6.06
 MEAN MINWIM/S)= 3.24

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VAFB, WL GT 3000H SUMMER RPD WIND CHANGE 3-90PH

NP	U COMPONENT CHANGE		V COMPONENT CHANGE		P	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	1.04	.56	3.18	.76	.009	3.39	.75	5.18
2	1.03	1.28	2.57	.49	.501	3.04	.59	4.04
3	1.23	1.12	2.48	.92	.767	1.82	.73	2.75
4	1.40	1.07	2.42	.66	.767	1.22	.65	2.66
5	1.33	.50	1.35	1.35	1.95	1.31	.69	3.35
6	.83	1.91	1.23	1.06	1.23	2.43	.89	4.03
7	1.68	.79	1.02	.76	.641	1.89	.67	2.88
8	1.65	1.37	2.22	1.97	.912	2.19	1.20	4.55
9	1.47	1.55	1.49	2.72	.765	3.19	1.40	5.58
10	2.53	2.99	.77	2.11	.642	3.77	2.40	9.56
11	.99	1.80	2.93	2.05	.414	3.64	1.92	7.04
12	1.39	1.22	2.27	1.00	1.00	2.53	.86	3.80
13	1.58	1.88	2.95	2.15	.917	3.16	2.00	6.84
14	1.07	1.82	2.60	1.79	.641	3.12	1.87	7.57
15	1.35	2.32	1.11	2.78	.903	3.19	1.74	7.40
16	1.35	.94	1.83	2.46	.607	2.60	.98	4.27
17	1.43	1.08	.35	1.46	.521	1.78	.66	2.67
18	1.81	1.92	.11	1.50	.513	2.80	1.14	4.73
19	5.80	1.73	.53	3.01	.369	6.67	1.23	8.66
20	2.90	2.25	1.18	1.40	.521	3.55	2.06	6.83
21	1.01	3.01	1.20	1.38	.595	3.65	1.24	6.11
22	1.44	2.71	.73	1.79	.926	3.03	1.98	6.98
23	1.12	.36	.12	.63	.549	.73	.15	1.02
24	1.74	1.09	2.01	1.20	.297	2.94	1.03	4.85
25	.94	1.00	.62	.87	.586	1.49	.90	3.27
26	1.97	.96	3.06	.61	.839	3.68	.96	5.35
27	1.77	.54	1.81	.99	.038	2.10	.83	3.63
28	1.37	2.03	.37	.81	.509	1.84	1.84	9.37
29	4.92	1.46	1.02	1.30	1.10	5.08	1.48	9.94
30	8.16	2.64	4.41	2.20	.925	9.33	3.29	18.38
31	1.37	.99	.05	.54	.171	1.58	.81	2.82
32	.09	1.23	.02	.65	.851	1.24	.64	2.07
33	1.17	1.29	.65	.98	.781	1.59	.73	2.92
34	1.26	1.23	.69	1.47	.359	2.00	.45	3.78
35	.66	1.11	.50	3.21	.796	2.75	2.15	7.34
36	.01	.69	1.73	1.64	.159	2.12	1.30	4.38
37	1.20	.76	1.75	1.06	.384	2.34	.85	3.84
38	1.16	1.75	.94	1.88	.165	2.64	.69	3.87
39	1.93	1.94	3.37	4.08	.540	5.46	2.35	8.82
40	2.18	2.42	1.04	1.37	.252	3.04	2.08	7.20
41	.27	1.00	.59	1.82	.477	2.03	.92	3.80
42	.64	1.39	.63	.81	.290	1.74	.60	2.66
43	.34	.97	.14	.35	.335	.99	.46	1.87
44	.62	2.11	.34	.75	.324	2.28	.54	3.38
45	1.53	1.10	.87	.87	.025	1.58	.71	3.89
46	.57	1.14	.93	.88	.792	1.55	.93	3.32
47	1.33	1.16	.22	.55	.185	1.19	.63	2.51
48	.10	.72	.18	.63	.232	.87	.45	2.28
49	.50	1.38	1.58	.43	.229	2.06	.75	3.31
50	.11	.35	.30	1.37	.469	1.11	.94	3.76

MEAN DUIM/S) = 1.17
 MEAN DVIM/S) = 1.04
 SD DUIM/S) = 2.45
 SD DVIM/S) = 2.20
 R(DU, DV) = .29
 MEAN WIM/S) = 2.63
 SD WIM/S) = 2.00
 SD MEANIM/S) = 1.52
 MEAN MAXIM/S) = 5.02
 SD MAXIM/S) = 2.93

VAFB.WL GT 6000M SUMMER AIR WIND CHANGE 3 Q/M

NP	U COMPONENT CHANGE		V COMPONENT CHANGE		P	VECTOP WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	1.04	.42	3.23	.70	.667	3.43	.67	4.63
2	1.27	.79	2.82	.71	.927	3.24	.39	3.86
3	1.30	.90	.50	.67	.771	1.73	.45	2.33
4	.48	.35	.42	.52	.312	.85	.29	1.50
5	.55	1.03	.14	.74	.630	1.14	.78	3.24
6	.90	.65	1.10	.91	.830	1.79	.21	2.11
7	-2.06	.76	.03	.61	.954	2.16	.70	3.10
8	.46	.90	.18	1.92	.922	2.02	.82	3.33
9	1.64	.92	.71	1.86	.922	2.47	1.17	4.49
10	2.24	2.53	.76	2.41	.777	3.19	2.75	9.99
11	.90	.73	2.97	1.69	.413	3.19	1.68	6.61
12	.45	.75	2.36	.84	.206	2.54	.75	3.55
13	.69	1.35	2.97	1.27	.977	3.22	1.33	5.20
14	.16	1.07	2.44	2.26	.913	3.10	1.62	6.20
15	.53	1.63	.05	2.27	.955	2.48	1.40	6.18
16	.17	.29	1.21	2.01	.834	2.14	1.00	3.72
17	.24	1.10	.13	.96	.818	1.33	.66	3.03
18	-2.18	1.14	.10	1.70	.759	2.93	.57	3.90
19	6.20	1.02	.88	2.46	.714	6.77	.70	8.07
20	-2.52	2.02	1.04	.56	.041	2.93	1.80	5.21
21	1.07	2.26	1.83	.76	.929	3.00	1.09	4.94
22	1.33	1.48	.55	.91	.963	1.85	1.28	3.91
23	.02	.31	.14	.50	.962	.57	.20	1.08
24	-1.71	.64	1.87	1.01	.567	2.74	.59	3.87
25	.99	.45	.42	.50	.682	1.15	.53	2.09
26	2.03	1.05	1.00	.64	.997	3.58	1.05	6.13
27	.82	.25	1.91	.60	.495	2.12	.47	2.75
28	-1.66	1.58	.24	.52	.209	1.86	1.45	6.18
29	-4.84	1.79	.20	1.40	.839	5.02	1.82	11.50
30	-8.45	2.86	-1.57	2.71	.932	9.66	3.81	18.29
31	-1.14	.53	.03	.36	.666	1.20	.53	2.04
32	.18	.64	.08	.29	.967	.62	.37	1.37
33	.43	.54	.59	.39	.526	.92	.35	1.56
34	.22	1.38	.91	1.47	.902	1.99	.96	4.87
35	.79	.66	.26	2.74	.427	2.41	1.67	5.19
36	.09	.40	1.75	.94	.781	1.82	.89	3.16
37	1.21	.59	1.90	.28	.636	2.33	.31	2.85
38	.39	1.18	.88	1.17	.281	1.82	.62	2.61
39	-2.27	1.85	3.30	3.99	.907	5.69	1.74	8.35
40	-2.18	1.29	1.01	.98	.905	2.57	1.35	4.59
41	.29	.95	.76	1.75	.816	1.86	1.08	4.95
42	.68	.78	.69	.56	.726	1.18	.68	2.38
43	.17	1.09	.14	.10	.411	1.04	.41	1.99
44	.68	2.34	.05	.54	.120	2.34	.85	3.25
45	.65	.84	1.08	.60	.358	1.44	.76	3.18
46	.40	.74	1.12	1.09	.356	1.44	1.03	3.86
47	.16	.73	.22	.50	.462	.87	.32	1.48
48	.12	.38	.03	.98	.253	.94	.48	2.05
49	.43	1.11	1.60	.23	.293	1.98	.31	2.45
50	.22	.20	.27	.47	.029	.50	.36	1.54

MEAN DIRM/S) = -1.19
 MEAN DIRM/S) = -1.06
 SD DIRM/S) = 2.23
 SD DIRM/S) = 2.09
 R(DIR,DIR) = .33
 MEAN WIM/S) = 2.33
 SD WIM/S) = 1.98
 SD MEANWIM/S) = 1.63
 MEAN MAXWIM/S) = 4.30
 SD MAXWIM/S) = 2.99

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VAFR, WL GT 9000M SUMMER 3RP WIND CHANGE 3-07M

NP	U COMPONENT CHANGE		V COMPONENT CHANGE		P	VECTOR WIND CHANGE		MAX
	MEAN	STD DEV	MEAN	STD DEV		MEAN	STD DEV	
1	.94	.51	.18	.75	.496	3.62	.15	3.84
2	1.11	.51	.75	.75	.749	3.18	.55	3.77
3	1.24	.58	.45	.54	.717	1.53	.25	1.89
4	.50	.29	.54	.20	.772	.92	.29	1.67
5	.34	.66	.30	.50	.733	.79	.24	1.13
6	.71	.39	.87	.50	.723	1.28	.18	1.56
7	-1.92	.84	.05	.37	.939	2.00	.75	2.95
8	.46	.46	.16	1.20	.931	1.28	.48	1.91
9	1.58	.58	.62	.99	.925	1.87	.83	3.13
10	2.81	2.61	1.41	2.09	.966	3.35	3.14	9.10
11	.81	.44	.75	.75	.907	3.10	.74	4.38
12	.38	.92	.26	.67	.609	2.48	.62	3.52
13	.47	.89	.76	.76	.932	2.89	.83	4.12
14	.06	1.54	1.58	1.58	.961	3.15	1.17	5.08
15	.47	1.32	.83	.83	.889	1.42	.81	3.19
16	.29	.26	1.99	1.99	.847	2.00	.83	3.49
17	.36	1.00	1.14	1.14	.952	1.36	.76	3.05
18	-1.97	1.09	1.17	1.17	.966	2.47	.62	3.34
19	6.22	.43	2.83	2.83	.693	6.89	.79	9.17
20	-2.65	1.42	.46	.46	.512	2.98	1.22	4.43
21	.61	1.41	.58	.58	.961	2.21	.68	3.31
22	1.29	.84	.51	.51	.972	1.44	.95	2.86
23	.31	.31	.46	.46	.975	.52	.25	.99
24	-1.81	.69	1.79	.63	.827	2.69	.35	3.45
25	1.07	.18	.35	.28	1.10	1.16	.15	1.45
26	2.09	.93	1.16	1.16	.931	3.75	1.45	6.85
27	.89	.16	.35	.35	.977	2.06	.29	2.36
28	-1.79	1.19	.14	.14	.563	1.88	1.07	3.82
29	-5.06	2.97	.03	1.40	.965	5.25	2.97	13.55
30	-9.06	3.36	-5.01	3.06	.999	10.41	4.41	18.57
31	-1.27	.40	.04	.10	.591	1.27	.40	2.07
32	.11	.30	.08	.22	.707	.35	.17	.76
33	.43	.46	.56	.14	.475	.83	.21	1.09
34	-1.10	1.02	-1.08	1.55	.941	1.87	1.05	4.49
35	.93	1.06	.43	1.21	.640	1.60	1.03	3.67
36	.16	.18	1.78	.61	.104	1.80	.60	2.62
37	1.27	.32	1.94	.51	.972	2.37	.37	3.37
38	-1.12	.75	1.06	.98	.942	1.47	.69	2.22
39	-2.04	1.91	2.65	3.08	.955	5.36	1.40	7.46
40	-2.44	1.13	.84	.49	.443	2.62	1.14	3.88
41	-.06	1.14	.99	1.39	.996	1.84	.91	3.90
42	.68	.60	.77	.47	.962	1.06	.71	2.36
43	-.01	.97	.14	.25	.638	.93	.40	1.66
44	.55	1.73	.18	.17	.992	1.67	.76	2.76
45	-.69	.83	1.10	.37	.945	1.43	.70	2.90
46	-.21	.68	1.37	1.05	.768	1.62	.92	3.08
47	-.13	.53	.16	.31	.714	.60	.24	1.00
48	-.16	.33	.18	.89	.404	.92	.32	1.64
49	-.53	.96	1.57	.11	.164	1.90	.26	2.29
50	-.24	.16	.47	.33	.574	.55	.33	1.36

MEAN DUIM/S) = .21
MEAN DVIM/S) = .02
SD DUIM/S) = 2.32
SD DVIM/S) = 1.96
R(DU, DV) = .37
MEAN WIM/S) = 2.24
SD WIM/S) = 2.06
MEAN MAXWIM/S) = 1.75
SD MAXWIM/S) = 3.73
MEAN MINWIM/S) = 3.17
SD MINWIM/S) = 3.17

VAFB UNFILTERED SUMMER 3HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	.17	2.73	2.02	2.79	-.083	4.13	1.50	8.63
2	.22	2.01	-1.45	2.90	-.228	3.13	1.69	6.37
3	.52	1.10	.42	1.44	-.305	1.68	.95	4.68
4	-.32	2.11	.71	2.22	-.351	2.77	1.51	5.85
5	-.49	2.09	-.49	1.67	-.147	2.46	1.25	5.09
6	2.64	3.00	-.06	1.86	-.147	3.94	1.98	7.96
7	1.62	3.29	-1.17	1.85	-.514	3.48	2.46	9.09
8	-.92	2.37	-.35	2.76	-.008	3.37	1.68	6.74
9	-.46	1.94	-.84	2.15	-.067	2.61	1.58	6.83
10	4.50	4.45	.70	6.29	-.407	8.17	3.65	14.19
11	.26	2.32	2.13	1.99	-.316	3.42	1.49	7.76
12	1.06	2.68	-3.06	2.19	-.158	4.36	1.85	8.29
13	-1.27	2.42	-.25	1.96	-.310	3.14	1.22	5.69
14	3.94	4.51	1.36	4.28	-.511	6.68	3.36	16.07
15	.97	3.16	-.30	1.95	-.159	3.41	1.77	7.24
16	1.18	2.95	3.89	3.18	-.055	5.69	1.70	10.49
17	1.66	3.46	1.58	4.41	-.326	5.69	2.05	10.36
18	.51	2.31	.90	1.82	-.531	2.95	.99	4.90
19	3.98	3.14	-4.67	4.55	-.628	7.74	2.85	12.86
20	-4.37	1.53	.82	1.47	-.138	4.73	1.40	8.72
21	-2.12	2.34	-1.52	2.56	-.170	3.82	2.04	6.85
22	.63	2.83	-.24	1.89	-.011	2.90	1.89	8.95
23	.43	1.24	.75	.79	-.290	1.52	.78	3.62
24	-3.75	1.93	-3.91	2.07	-.221	5.90	1.59	9.49
25	.73	1.43	.31	1.31	-.191	1.90	.87	4.37
26	3.02	1.70	6.82	2.00	-.099	7.72	1.74	11.46
27	-.13	1.63	-.92	1.46	-.018	2.13	1.04	5.48
28	-.86	2.31	.43	2.21	-.379	3.02	1.41	6.02
29	-18.05	4.22	-3.67	1.99	-.567	18.50	4.31	23.82
30	-11.06	4.70	-8.57	4.22	-.875	14.12	6.02	22.40
31	-2.05	2.39	-1.16	2.13	-.684	3.55	1.78	7.86
32	-.32	1.19	.43	1.52	-.094	1.70	1.05	6.29
33	.00	4.24	-.46	4.83	-.790	4.27	4.82	33.01
34	-.26	2.97	-3.68	2.68	-.019	4.82	2.52	10.10
35	3.64	3.04	3.91	9.73	-.449	9.74	6.11	24.55
36	-.05	2.34	.41	1.59	-.027	2.46	1.45	6.22
37	2.24	1.51	2.46	1.64	-.290	3.69	1.55	6.93
38	1.52	2.13	.95	2.18	-.211	6.05	2.29	10.67
39	2.09	3.17	2.96	4.33	-.192	2.92	2.60	9.60
40	-1.33	2.93	-.34	2.21	-.585	2.92	2.31	9.91
41	-1.72	2.80	-1.48	3.16	-.000	3.20	2.61	11.85
42	-.46	3.21	1.20	2.27	-.666	3.29	2.12	11.23
43	.61	2.96	.33	2.47	-.282	5.42	2.42	12.83
44	-1.22	3.50	-2.98	3.55	-.775	3.55	1.43	6.33
45	-2.30	1.65	-.99	2.38	-.067	3.96	2.13	8.92
46	-.54	3.39	.89	2.77	-.637	2.62	2.17	8.22
47	-1.78	1.95	-.38	2.12	-.408	3.52	1.32	5.99
48	-.83	2.44	-.28	2.73	-.269	3.20	1.15	5.71
49	-1.44	2.10	1.40	1.77	-.307	3.20	1.22	4.85
50	-.34	1.31	.83	1.71	-.267	1.98		

MEAN DU(M/S) = -.37
 MEAN DV(M/S) = -.01
 SD DU(M/S) = 4.43
 SD DV(M/S) = 3.84
 R(DU,DV) = .30
 MEAN W(M/S) = 4.45
 SD W(M/S) = 3.83
 MEAN MAXW(M/S) = 9.55
 SD MAXW(M/S) = 5.68

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VAFB, WL GT 500M, SUMMER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	.17	2.64	2.02	2.77	-.078	4.04	1.52	8.62
2	.21	1.96	-.45	2.87	.233	3.11	1.63	6.31
3	.52	1.07	.42	1.42	.359	1.65	.95	4.70
4	-.32	2.11	.72	2.19	.147	2.43	1.24	5.89
5	-.49	2.07	-.07	1.85	.159	3.91	1.98	4.99
6	2.63	2.99	-1.17	1.82	-.554	3.44	2.46	8.01
7	1.62	3.26	-.36	2.73	.011	3.35	1.65	9.04
8	-.92	2.36	-.84	2.13	-.051	2.54	1.57	6.61
9	-.46	1.87	.71	6.30	.409	8.15	3.62	7.08
10	4.50	4.39	2.13	1.93	.325	3.37	1.47	14.08
11	.26	2.29	-3.06	2.17	-.152	4.37	1.78	7.53
12	1.06	2.66	-.26	1.91	-.319	3.12	1.17	8.08
13	-1.27	2.41	1.37	4.29	-.164	6.70	3.35	5.55
14	3.95	4.51	3.90	1.95	.060	5.69	1.70	7.31
15	.98	3.16	1.58	4.43	-.327	5.70	2.03	10.13
16	1.18	2.93	1.90	1.77	-.536	2.90	.94	10.23
17	1.65	3.46	-4.68	4.52	-.640	7.72	2.85	12.62
18	.50	2.27	.83	1.41	.153	4.71	1.41	4.48
19	3.97	3.12	-1.52	2.52	-.181	3.79	2.06	8.50
20	-4.38	1.52	.25	1.84	-.001	2.88	1.81	7.13
21	-2.12	2.34	.75	.77	-.306	1.51	.77	8.46
22	.63	2.79	-3.91	2.06	-.231	5.90	1.56	3.66
23	.43	1.23	.31	1.28	-.196	1.88	.83	9.20
24	-3.74	1.92	6.82	2.00	-.087	7.71	1.74	4.25
25	.73	1.41	-.92	1.44	.040	2.12	1.02	11.52
26	3.03	1.66	.42	2.19	.380	3.01	1.38	5.49
27	-.13	1.62	-3.67	1.95	.589	18.51	4.30	5.70
28	-.86	2.29	-8.58	4.19	.880	14.12	6.02	23.81
29	-18.06	4.20	-1.16	2.13	-.687	3.55	1.81	14.12
30	-11.07	4.68	.43	1.51	.103	1.70	1.03	8.05
31	-2.06	2.39	-.46	4.40	.765	4.23	4.23	5.95
32	-.32	1.17	-3.68	2.62	.045	4.70	2.62	26.23
33	.00	4.02	3.91	9.69	.471	9.75	6.01	10.06
34	-.26	2.91	.41	1.58	.035	2.46	1.43	24.11
35	3.65	2.98	2.46	1.63	.324	3.67	1.56	6.09
36	-.04	2.33	.95	2.17	.229	3.27	1.34	6.94
37	2.24	1.49	2.97	4.35	.188	6.09	2.25	5.98
38	1.53	2.13	-1.49	3.17	-.588	2.91	2.62	10.64
39	2.09	3.18	1.20	2.27	-.002	4.22	2.30	9.91
40	-1.32	2.94	.33	2.47	-.286	3.20	2.64	11.94
41	-1.72	2.81	-2.98	3.56	.676	3.30	2.12	11.09
42	-.47	3.22	-2.98	2.38	-.063	5.43	2.43	12.77
43	.61	2.97	.99	2.78	.634	3.97	2.14	6.11
44	-1.22	3.51	.89	2.11	-.422	2.60	2.16	9.04
45	-2.30	1.64	-.28	2.74	-.270	3.24	1.33	8.15
46	-.55	3.40	1.40	1.78	.321	1.97	1.13	5.80
47	-1.78	1.92	.83	1.68	.254			6.25
48	-.83	2.45						4.61
49	-1.45	2.14						
50	-.34	1.29						

MEAN DU(M/S) = -.37
 MEAN DV(M/S) = -.01
 SD DU(M/S) = 4.42
 SD DV(M/S) = 3.82
 R(DU,DV) = .30
 MEAN W(M/S) = 4.44
 SD W(M/S) = 3.81
 SD MEAN(W/M/S) = 3.05
 MEAN MAXW(M/S) = 9.33
 SD MAXW(M/S) = 5.15

VAFB, WL GT 1500M, SUMMER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE			V-COMPONENT CHANGE			R	VECTOR WIND CHANGE			MAX
	MEAN	STD.DEV.		MEAN	STD.DEV.			MEAN	STD.DEV.		
1	.18	2.21	2.04	2.51	-.179	3.66	1.40	3.66	1.40	6.65	
2	.20	1.37	-46	2.47	-.332	2.59	1.24	2.59	1.24	5.15	
3	.52	.91	.46	1.13	.565	1.38	.82	1.38	.82	3.79	
4	.31	1.99	.78	1.83	.481	2.61	1.08	2.61	1.08	5.17	
5	.49	1.92	-45	1.28	.279	2.04	1.26	2.04	1.26	4.81	
6	2.61	2.82	-.08	1.59	.248	3.76	1.79	3.76	1.79	6.22	
7	1.65	3.02	-1.15	1.54	-.699	3.17	2.33	3.17	2.33	8.78	
8	-.94	1.91	-.37	2.26	-.062	2.87	1.22	2.87	1.22	5.68	
9	-.37	1.23	-.85	1.62	-.043	2.02	.95	2.02	.95	4.16	
10	4.49	4.01	.63	6.00	.436	7.75	3.52	7.75	3.52	13.94	
11	.27	2.02	2.12	1.49	.342	3.02	1.32	3.02	1.32	6.50	
12	1.10	2.03	-3.11	1.66	-.049	3.97	1.42	3.97	1.42	7.48	
13	-1.33	2.08	-.28	1.32	-.500	2.72	.70	2.72	.70	4.37	
14	3.96	4.23	1.24	3.87	-.519	6.29	3.22	6.29	3.22	13.56	
15	1.02	2.76	-.28	1.52	-.059	2.93	1.58	2.93	1.58	6.01	
16	1.09	2.40	3.87	2.94	.112	5.42	1.08	5.42	1.08	7.31	
17	1.66	3.09	1.57	4.18	-.375	5.40	1.72	5.40	1.72	8.63	
18	.43	2.16	.85	1.48	-.587	2.67	.77	2.67	.77	3.97	
19	3.89	2.90	-4.62	4.07	-.725	7.08	3.36	7.08	3.36	11.52	
20	-4.39	1.37	.81	.97	.048	4.58	1.35	4.58	1.35	8.12	
21	-2.05	2.03	-1.46	2.06	-.128	3.30	1.94	3.30	1.94	6.18	
22	.55	2.05	.24	1.44	-.004	2.33	1.08	2.33	1.08	5.10	
23	.43	1.17	.76	.58	-.429	1.40	.72	1.40	.72	3.17	
24	-3.70	1.50	-3.86	1.86	-.153	5.67	1.47	5.67	1.47	7.57	
25	.72	1.17	.31	1.10	-.325	1.68	.60	1.68	.60	3.26	
26	3.00	1.60	6.77	1.84	-.016	7.63	1.63	7.63	1.63	10.61	
27	-.14	1.39	-.92	1.18	.229	1.95	.62	1.95	.62	3.53	
28	-.87	2.13	.37	1.98	.362	2.77	1.28	2.77	1.28	5.16	
29	-17.95	4.04	-3.64	1.71	.686	18.38	4.11	18.38	4.11	23.15	
30	-11.03	4.34	-8.55	4.03	.929	14.03	5.75	14.03	5.75	20.98	
31	-2.13	2.14	-1.10	2.02	-.724	3.35	1.77	3.35	1.77	7.93	
32	-.29	1.08	.42	1.39	.236	1.59	.90	1.59	.90	4.74	
33	-.08	3.20	-.46	2.79	.702	3.48	2.47	3.48	2.47	12.23	
34	-.22	2.57	-3.70	2.30	.134	4.43	2.45	4.43	2.45	8.67	
35	3.68	2.57	3.95	9.05	.524	9.23	5.69	9.23	5.69	20.07	
36	-.09	2.06	.34	1.19	.061	2.13	1.09	2.13	1.09	4.39	
37	2.28	1.30	2.45	1.38	.351	3.54	1.51	3.54	1.51	6.51	
38	1.53	1.90	.91	1.95	.253	2.93	1.41	2.93	1.41	5.24	
39	2.15	2.90	2.95	4.02	.237	5.76	2.15	5.76	2.15	9.43	
40	-1.34	2.81	-.34	1.92	-.653	2.73	2.45	2.73	2.45	9.12	
41	-1.72	2.63	-1.49	2.92	-.012	3.91	2.30	3.91	2.30	9.09	
42	-.43	2.99	1.26	2.00	.731	3.12	2.22	3.12	2.22	10.13	
43	.59	2.65	.32	2.26	-.260	5.30	2.13	5.30	2.13	10.73	
44	-1.19	3.35	-2.97	3.35	-.807	3.14	1.41	3.14	1.41	5.41	
45	-2.30	1.47	.96	1.87	-.083	3.80	1.85	3.80	1.85	8.41	
46	-.55	3.21	.88	2.56	.726	2.17	1.39	2.17	1.39	5.05	
47	-1.79	1.37	.41	1.17	-.558	3.34	1.24	3.34	1.24	5.34	
48	.82	2.31	-.26	2.58	-.296	3.02	1.06	3.02	1.06	7.21	
49	-1.54	1.87	1.36	1.59	.493	1.62	.91	1.62	.91	3.47	
50	-.33	.88	.85	1.36	.049	1.62	.91	1.62	.91	3.47	

MEAN DU(M/S) = -.37
 MEAN DV(M/S) = -.01
 SD DU(M/S) = 4.23
 SD DV(M/S) = 3.56
 R(DU,DV) = .32
 MEAN W(M/S) = 4.13
 SD W(M/S) = 3.69
 SD MEAN(M/S) = 3.07
 MEAN MAXW(M/S) = 7.86
 SD MAXW(M/S) = 4.37

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VAFB, WL GT 3000M, SUMMER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	.03	1.48	1.94	2.21	-.511	3.06	1.23	5.17
2	.12	.53	-.48	2.05	.570	1.77	1.26	3.92
3	.67	.46	-.46	2.05	.372	1.18	.53	2.13
4	-.23	1.33	.72	1.58	.663	2.08	.69	3.63
5	-.51	1.65	-.31	1.11	.279	1.90	.84	3.70
6	2.51	2.34	1.10	1.28	-.771	3.27	1.64	6.26
7	1.57	2.74	-1.10	1.05	-.771	3.06	1.72	5.79
8	-1.00	1.43	-.31	1.84	.175	2.40	.85	3.79
9	-.30	.94	-.77	1.38	.241	1.71	.73	3.30
10	4.41	3.91	.63	5.61	.448	7.46	3.29	12.52
11	.37	1.40	2.34	.311	.311	2.80	.77	5.84
12	1.13	1.67	-3.05	1.41	.000	3.78	1.05	5.87
13	-1.37	1.83	-.24	.91	-.674	2.43	.43	3.30
14	4.01	3.86	1.10	3.21	-.543	5.75	3.05	11.54
15	.98	2.28	-.33	1.08	-.078	2.63	.73	4.06
16	1.11	1.33	3.66	2.37	-.024	4.37	1.71	6.98
17	1.76	2.65	1.56	3.98	.343	5.11	1.50	7.23
18	.48	1.96	.93	1.33	-.652	2.50	.68	3.48
19	3.66	2.41	-4.47	4.02	-.969	6.78	3.04	10.32
20	-4.28	1.19	.81	.77	.414	4.44	1.11	6.59
21	-1.93	1.85	-1.32	1.80	-.028	3.02	1.74	5.16
22	.58	1.53	.22	1.03	-.098	1.79	.76	3.20
23	.33	1.06	.76	.38	-.075	1.24	.64	2.69
24	-3.59	.74	-3.84	1.60	.303	5.37	1.35	6.73
25	.69	.89	.24	.80	-.305	1.25	.62	2.37
26	2.96	1.29	6.82	1.69	-.204	7.60	1.44	9.67
27	-.15	1.00	-.97	.66	.228	1.44	.55	2.17
28	-.90	1.95	.38	1.59	.504	2.55	.88	3.59
29	-17.56	4.04	-3.55	1.44	.803	17.95	4.14	22.13
30	-10.81	4.30	-8.40	3.82	.964	13.73	5.66	20.38
31	-2.00	1.92	-.98	1.65	-.854	3.05	1.44	6.23
32	-.23	1.02	.42	.98	.369	1.33	.66	2.90
33	-.12	2.44	-.36	2.17	.778	2.79	1.74	6.05
34	-.25	1.75	-3.61	1.89	-.209	4.00	1.93	7.34
35	3.58	1.87	3.66	8.33	.502	8.19	5.65	19.51
36	-.11	1.50	.24	.66	.425	1.49	.73	2.89
37	2.34	.99	2.45	.91	.085	3.51	.97	5.20
38	1.53	1.70	.89	1.78	.309	2.82	1.08	4.73
39	2.15	2.40	2.79	3.39	.371	4.90	2.37	8.83
40	-1.44	2.36	-.32	1.65	-.724	2.64	1.87	6.70
41	-1.74	2.14	-1.45	2.39	.093	3.19	2.29	7.10
42	-.21	2.34	1.34	1.43	.834	2.79	1.24	5.99
43	.76	2.35	.20	2.27	-.469	2.74	1.94	9.16
44	-1.15	3.03	-3.03	2.94	-.860	4.92	2.00	9.07
45	-2.26	.94	.95	1.31	-.329	2.70	1.14	4.41
46	-.49	2.83	.86	2.30	.910	3.48	1.46	6.43
47	-1.75	.88	.37	.52	-.792	1.84	.93	3.69
48	-.88	2.15	-.25	1.97	-.403	2.91	.94	4.51
49	-1.64	1.70	1.32	1.11	.581	2.67	1.18	6.72
50	-.32	.56	.86	1.03	.006	1.30	.73	2.87

MEAN DU(M/S) = -.35
 MEAN DV(M/S) = .00
 SD DU(M/S) = 3.98
 SD DV(M/S) = 3.29
 R(DU,DV) = .35
 MEAN W(M/S) = 3.75
 SD W(M/S) = 3.57
 SD MEAN(W/S) = 3.04
 MEAN MAXW(M/S) = 6.48
 SD MAXW(M/S) = 4.36

VAFB, WL GT 6000M, SUMMER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	.14	1.24	1.92	2.13	-.917	2.95	1.03	4.52
2	.06	.46	-.40	1.57	.612	1.32	1.03	3.76
3	.63	.27	.34	.52	.072	.85	.35	1.53
4	-.12	.95	.86	1.12	.765	1.61	.55	2.41
5	-.36	1.26	-.19	.59	.672	1.27	.70	2.56
6	2.23	1.61	.23	1.10	.084	2.64	1.35	4.49
7	1.91	1.96	-1.32	.44	-.568	2.67	1.50	4.94
8	-1.06	1.11	-.37	1.25	.488	1.84	.83	3.12
9	-.20	.79	-.89	.46	-.008	1.21	.45	2.70
10	4.87	3.83	.27	4.20	.636	6.70	3.34	11.23
11	.54	1.12	2.50	.60	.869	2.74	.81	4.12
12	1.12	1.53	-3.17	1.00	-.170	3.71	.91	4.92
13	-1.62	1.57	-.05	.62	-.926	2.19	.81	3.25
14	3.99	2.30	1.00	1.62	-.851	4.69	1.67	7.97
15	.98	1.38	-.47	.36	.304	1.61	.80	2.95
16	1.08	.65	3.85	1.55	.407	4.05	1.55	6.37
17	2.12	1.45	1.54	1.89	-.061	3.32	1.25	4.92
18	.76	1.52	.89	1.00	-.400	2.03	.73	2.96
19	3.90	1.60	-4.64	4.09	-.929	6.76	3.20	10.68
20	-4.61	.80	.83	.31	.859	4.71	.71	5.82
21	-1.73	1.19	-.93	1.73	.476	2.77	.76	4.22
22	.63	1.03	.01	.62	.159	1.16	.70	2.33
23	.25	.68	.79	.38	-.092	1.08	.34	1.53
24	-3.79	.76	-3.89	1.67	.610	5.53	1.50	7.47
25	.68	.51	.27	.53	-.198	.94	.45	1.51
26	2.97	1.05	7.23	1.07	.556	7.87	1.18	9.32
27	-.14	.83	-.95	.30	.539	1.26	.32	1.92
28	.75	1.55	.67	.81	.668	1.94	.54	2.57
29	-17.91	4.46	-3.70	1.12	.881	18.30	4.56	23.78
30	-10.96	4.55	-8.56	3.81	.992	13.91	5.91	19.78
31	-2.20	1.38	-.70	1.09	-.423	2.68	1.12	4.40
32	-.17	.61	.43	.38	.705	.76	.39	1.56
33	.22	1.38	-.15	.79	.458	1.45	.71	2.71
34	-.31	1.45	-3.55	1.48	-.173	3.85	1.47	5.72
35	3.71	1.33	4.69	4.84	.577	6.82	3.79	12.87
36	-.30	.67	.05	.17	-.123	.61	.45	1.67
37	2.44	.60	2.52	.47	.406	3.53	.64	4.22
38	1.71	.89	.84	1.10	.158	2.14	1.00	3.66
39	2.18	2.82	3.25	2.86	.557	4.98	2.57	8.35
40	-1.76	1.77	-.30	1.20	-.756	2.45	1.33	4.80
41	-1.82	1.91	-1.31	1.43	.169	2.83	1.64	5.39
42	-.13	1.41	1.52	.73	.875	2.16	.42	2.92
43	.66	1.77	.20	2.31	-.627	2.63	1.41	7.05
44	-.94	1.59	-3.22	2.35	-.821	4.07	1.66	6.83
45	-2.33	.50	.82	.52	-.377	2.51	.57	3.18
46	-.57	1.99	.87	1.67	.929	2.54	1.16	4.67
47	-1.82	.65	.40	.40	-.811	1.88	.67	2.98
48	1.27	1.17	-.42	1.39	-.062	2.14	.69	3.16
49	-1.91	1.01	1.34	.98	.950	2.68	.48	4.25
50	-.24	.29	.86	.72	.174	1.07	.50	1.75

MEAN DU(M/S)= -.33
 MEAN DV(M/S)= .03
 SD DU(M/S)= 3.88
 SD DV(M/S)= 2.95
 R(DU,DV)= .44
 MEAN W(M/S)= 3.35
 SD W(M/S)= 3.55
 SD MEAN(M/S)= 3.17
 MEAN MAXW(M/S)= 5.24
 SD MAXW(M/S)= 4.31

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VAFB, WL GT 9000M, SUMMER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	2.02	1.58	-1.808	1.03	-1.44	2.21	1.44	4.07
2	-1.45	1.03	-1.048	1.03	1.80	.91	.80	3.12
3	.36	.30	.048	.30	.26	.87	.26	1.26
4	-1.14	.58	.670	.58	.43	1.24	.43	1.75
5	-1.43	.31	.222	.31	.34	.80	.34	1.52
6	-1.42	.70	.412	.70	.77	2.54	.77	3.42
7	-1.32	.25	.410	.25	.73	2.27	.73	3.35
8	-1.28	.46	.639	.46	.64	1.38	.64	2.31
9	-1.92	.33	.678	.33	.30	1.03	.30	2.10
10	.12	2.31	.592	2.31	.30	5.20	3.17	9.22
11	2.54	.31	.920	.31	.49	2.74	.49	3.37
12	-3.17	1.04	.580	1.04	1.15	3.43	1.15	4.64
13	-1.10	.79	.828	.79	.45	1.95	.45	2.56
14	.99	1.26	.929	1.26	1.04	4.34	1.04	6.29
15	-1.18	.44	.369	.44	.58	1.29	.58	2.26
16	3.73	.47	.414	.47	.48	3.91	.48	4.68
17	1.52	.92	.133	.92	.62	2.88	.62	3.56
18	1.16	.89	.151	.89	.71	1.64	.71	3.66
19	-4.52	3.24	.959	3.24	3.07	6.35	3.07	9.66
20	.80	.39	.790	.39	.97	4.72	.97	5.88
21	-1.19	.54	.712	.54	.68	2.04	.68	3.06
22	.76	.42	.527	.42	.17	1.02	.17	1.20
23	-3.81	1.10	.545	1.10	1.26	5.32	1.26	6.84
24	.27	.33	.439	.33	.42	.80	.42	1.40
25	7.15	1.08	.836	1.08	9.21	7.78	9.21	9.21
26	-1.08	.29	.892	.29	.37	1.23	.37	1.99
27	.72	.39	.771	.39	.27	1.34	.27	1.76
28	-3.68	.71	.976	.71	3.80	17.94	3.80	22.21
29	-8.43	3.34	.996	3.34	5.25	13.81	5.25	19.41
30	-1.48	.79	.271	.79	.88	2.34	.88	3.51
31	.43	.32	.670	.32	.32	.56	.32	1.15
32	.36	1.14	.196	1.14	.87	1.08	.87	4.30
33	-3.65	.75	.329	.75	.66	3.84	.66	4.88
34	4.55	2.55	.724	2.55	9.60	5.97	2.39	9.60
35	-1.03	.28	.691	.28	.61	.75	.61	2.66
36	2.54	.51	.753	.51	.61	3.50	.61	4.02
37	.77	.58	.427	.58	.51	1.75	.51	2.52
38	3.55	1.89	.690	1.89	2.12	4.63	2.12	7.46
39	-1.39	.61	.804	.61	.93	2.25	.93	3.73
40	-1.51	.76	.392	.76	.91	2.65	.91	4.04
41	1.68	.29	.752	.29	.29	1.91	.29	2.38
42	-1.14	2.29	.951	2.29	1.82	2.77	1.82	7.12
43	-3.15	1.44	.442	1.44	1.31	3.36	1.31	5.09
44	.92	.26	.120	.26	.46	2.50	.46	2.97
45	.88	.81	.939	.81	.53	1.73	.53	3.08
46	-1.82	.44	.730	.44	.56	1.90	.56	2.63
47	-1.31	.81	.137	.81	.34	1.64	.34	2.15
48	1.23	1.07	.961	1.07	.33	2.64	.33	3.30
49	.79	.54	.148	.54	.45	.89	.45	1.50
50								

MEAN DU(M/S) = -.30
 MEAN DV(M/S) = .05
 SD DU(M/S) = 3.69
 SD DV(M/S) = 2.68
 R(DU, DV) = -.47
 MEAN W(M/S) = 3.05
 SD W(M/S) = 3.40
 MEAN MAXW(M/S) = 4.51
 SD MAXW(M/S) = 4.06

VAFB J1MSPHERE 7HR WIND CHANGE 3-9KM WINTER

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-.61	2.09	-11.24	7.95	.786	13.28	7.98	31.50
2	-.91	5.43	-9.60	6.56	.730	11.00	6.67	24.44
3	-1.51	5.14	-10.07	5.99	.623	11.41	5.99	22.81
4	-.78	4.67	-8.24	4.61	.266	9.59	4.43	20.35
5	-.98	4.60	-8.53	4.18	.301	9.73	4.32	20.99
6	-1.17	4.25	-5.88	5.06	.129	8.05	3.83	18.28
7	-.66	4.27	-5.51	5.95	.342	8.39	3.73	18.07
8	-.09	2.97	-3.36	1.46	.200	2.88	1.66	8.70
9	-.06	2.82	-.57	1.66	.384	2.93	1.56	8.91
10	1.86	2.56	2.78	1.95	.274	4.31	1.72	7.83
11	1.95	3.17	3.22	1.70	.099	4.77	2.07	11.46
12	1.48	3.02	2.53	2.40	.242	4.31	2.20	10.67
13	8.44	3.79	-2.86	3.58	.453	9.81	3.21	16.02
14	9.22	3.41	-2.39	3.88	.362	10.35	3.19	19.07
15	2.67	1.99	-4.44	2.63	.633	3.94	1.62	8.40
16	7.78	5.02	10.39	5.81	-.376	14.67	3.48	21.65
17	1.12	2.58	2.04	3.86	.693	4.67	2.26	9.28
18	.84	3.08	1.13	3.77	.627	4.23	2.79	9.36
19	1.15	3.26	1.21	3.18	.663	4.21	2.39	9.61
20	.95	1.34	-.72	1.92	.140	2.22	1.41	6.73
21	.62	2.04	-.62	2.64	-.235	3.19	1.30	7.14
22	1.33	1.61	3.12	3.26	.670	4.55	2.00	8.98
23	-.54	2.61	-9.42	4.70	.270	9.88	4.52	18.28
24	3.83	1.93	3.41	2.86	.436	5.57	2.69	10.23
25	2.87	5.42	7.42	6.59	.831	9.64	6.57	22.44
26	-3.92	5.88	-4.21	2.43	-.482	7.84	3.47	14.79
27	-3.71	6.01	-4.13	2.31	-.618	7.71	3.56	15.38
28	-2.73	4.10	8.86	2.86	.193	10.20	2.61	15.28
29	-1.24	1.42	.64	.89	-.390	1.95	.74	3.24
30	-1.55	1.38	.64	.97	-.621	2.25	.76	3.75
31	-1.20	.93	1.08	1.21	.333	2.06	.84	3.63
32	-1.40	.81	.81	.97	.179	1.96	.63	3.48
33	-2.31	1.05	1.69	1.43	.247	3.23	.93	5.72
34	-2.38	1.12	1.41	1.30	.090	3.05	1.12	6.29
35	-1.88	1.03	1.12	1.11	-.033	2.48	.97	4.70
36	2.24	1.58	-.26	2.44	.054	3.43	1.32	7.51
37	4.70	3.08	2.92	4.94	-.359	7.64	2.46	12.93
38	1.50	1.75	3.75	2.20	.293	4.44	2.12	9.16
39	-6.24	5.02	-6.46	2.45	.319	9.55	4.54	21.03
40	-8.16	8.36	-11.25	6.38	.865	14.95	8.95	29.76
41	-27.08	28.90	-25.31	15.72	.792	41.65	26.82	87.37
42	10.98	2.64	4.81	10.10	.620	15.42	3.80	25.11
43	1.95	3.95	1.31	3.92	.108	5.52	2.44	10.97
44	1.67	3.26	-4.16	3.02	.230	5.58	2.95	12.42
45	-.93	4.28	-6.98	4.14	.316	8.41	3.78	21.51
46	-.12	2.27	1.56	4.41	-.123	4.83	1.93	8.68
47	.30	2.73	2.02	3.82	.148	4.81	1.73	8.20
48	9.14	4.71	-11.17	4.41	-.219	14.96	5.11	26.20
49	-1.62	1.87	2.01	2.14	-.268	3.54	1.49	6.76
50	2.51	3.02	2.69	4.43	.257	5.95	2.62	10.06
51	-2.82	2.74	3.15	4.53	.552	5.82	2.35	12.71
52	.69	2.69	3.08	3.14	.318	4.64	2.35	9.14
53	.83	2.14	1.97	3.16	.079	3.94	1.89	9.01
54	.18	1.95	.84	2.85	-.393	3.10	1.74	8.75
55	.58	4.43	-2.31	2.59	.206	5.25	2.08	10.98
56	-2.04	3.77	6.10	3.00	-.616	7.23	3.50	14.22
57	-2.93	3.42	1.87	2.99	-.439	4.72	3.22	13.54

MEAN DU(M/S)= .13
 MEAN DV(M/S)= -1.07
 SD DU(M/S)= 7.25
 SD DV(M/S)= 7.43
 R(DU,DV)= .50
 MEAN W(M/S)= 7.12
 SD W(M/S)= 7.64
 SD MEAN W(M/S)= 5.93
 MEAN MAX W(M/S)= 14.45
 SD MAX W(M/S)= 12.02

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VAFB JMS PHERE 7 HR WIND CHANGE 9-16 KM WINTER

NP	U-COMPONENT CHANGE			V-COMPONENT CHANGE			R	VECTOR WIND CHANGE			MAX
	MEAN	STD. DEV.	CHANGE	MEAN	STD. DEV.	CHANGE		MEAN	STD. DEV.	CHANGE	
1	.45	4.32	1.70	8.76	5.75	29.10	.643	8.76	5.75	29.10	
2	.87	4.13	2.68	5.42	3.25	16.07	.441	6.60	3.25	16.07	
3	2.18	3.71	4.39	5.47	3.00	14.88	.224	7.65	3.00	14.88	
4	2.37	3.22	4.91	3.51	2.26	13.33	.101	6.84	2.26	13.33	
5	4.40	3.45	7.89	3.25	1.66	16.76	.206	9.71	3.14	16.76	
6	4.57	2.86	7.31	2.76	1.47	14.71	.122	9.17	2.45	14.71	
7	6.87	2.73	10.42	2.99	1.74	17.37	-.074	12.84	2.70	17.37	
8	-2.24	4.85	-2.47	6.70	4.67	21.93	-.419	7.25	4.67	21.93	
9	-1.34	6.16	-3.34	8.21	6.06	28.00	-.606	8.80	6.06	28.00	
10	5.94	5.15	5.92	3.36	3.37	18.32	-.019	9.83	3.37	18.32	
11	6.47	4.69	7.49	3.27	3.35	18.62	-.132	10.93	3.35	18.62	
12	5.52	4.28	6.70	2.82	3.14	17.18	-.030	9.58	3.14	17.18	
13	3.48	3.77	-2.06	3.50	3.44	15.14	-.345	5.56	3.44	15.14	
14	3.60	3.81	-2.26	3.32	3.27	15.08	-.389	5.73	3.27	15.08	
15	-1.49	4.33	3.03	2.66	2.09	13.15	-.115	5.55	2.09	13.15	
16	-1.87	3.39	3.14	6.46	7.31	16.49	-.106	7.31	3.60	16.49	
17	2.25	3.98	2.51	4.03	6.02	12.12	-.171	6.02	3.60	12.12	
18	3.29	4.05	1.40	3.77	5.97	12.80	-.053	5.97	2.78	12.80	
19	4.90	4.78	1.72	4.01	7.23	14.65	-.232	7.23	3.67	14.65	
20	2.18	3.21	.06	2.93	4.30	9.81	-.385	4.30	2.26	9.81	
21	1.82	4.14	.26	2.87	4.91	10.87	-.068	4.91	2.15	10.87	
22	3.41	2.37	6.56	2.59	7.73	13.68	-.429	12.63	6.37	29.36	
23	-6.42	4.34	-8.23	3.05	1.96	9.57	-.279	3.94	1.96	9.57	
24	.81	2.92	-9.6	3.82	12.60	7.31	-.090	12.60	7.31	30.35	
25	4.13	4.32	10.49	8.16	10.51	23.01	-.151	10.51	4.71	23.01	
26	-5.52	6.97	-2.11	7.02	19.65	19.65	-.103	19.65	5.36	19.65	
27	-4.97	5.93	.68	7.10	4.37	22.18	-.296	9.04	4.37	22.18	
28	-3.19	5.42	9.44	5.72	11.69	4.97	-.163	11.69	6.23	6.23	
29	-2.10	1.65	1.04	2.08	3.07	1.56	-.109	3.07	1.56	6.23	
30	-2.62	1.57	1.04	2.13	3.48	7.08	-.100	3.48	1.67	7.08	
31	3.53	3.09	3.29	2.37	5.42	13.76	-.358	5.42	3.00	13.76	
32	-1.51	1.82	1.25	2.11	3.13	6.39	-.257	3.13	1.34	6.39	
33	.43	3.66	1.87	2.76	4.40	10.98	-.467	4.40	2.29	10.98	
34	1.05	3.94	1.90	2.69	4.63	10.40	-.556	4.63	2.44	10.40	
35	2.60	4.07	1.08	2.53	4.82	12.14	-.298	4.82	2.77	12.14	
36	3.77	3.05	2.70	5.05	6.36	16.75	-.169	6.36	3.98	16.75	
37	2.89	7.38	2.09	8.35	10.72	21.46	-.764	10.72	4.65	21.46	
38	.98	3.08	3.19	3.40	5.23	2.21	-.072	5.23	2.21	12.24	
39	-2.45	7.68	-3.17	4.70	8.46	5.03	-.048	8.46	5.03	23.29	
40	-7.28	8.13	-3.82	7.49	11.19	25.24	-.832	11.19	8.03	25.24	
41	-23.35	18.93	-18.87	14.56	30.55	81.85	-.936	30.55	23.20	81.85	
42	-.72	5.37	-17.43	6.38	18.40	29.27	-.126	18.40	5.95	29.27	
43	-3.31	5.96	-6.64	4.69	9.71	20.57	-.207	9.71	4.28	20.57	
44	-1.43	6.32	-3.25	6.78	9.38	17.48	-.503	9.38	2.91	17.48	
45	-1.15	6.47	-5.52	6.35	8.74	18.16	-.607	8.74	4.35	18.16	
46	4.16	2.72	2.36	3.97	6.24	16.09	-.303	6.24	2.86	16.09	
47	3.11	2.77	3.10	4.94	5.49	10.28	-.382	5.49	2.53	10.28	
48	6.12	3.66	-6.07	4.94	9.94	16.77	-.061	9.94	3.64	16.77	
49	.53	3.31	.15	5.45	3.75	7.80	-.032	3.75	1.74	7.80	
50	1.81	4.40	.78	5.45	6.79	12.20	-.238	6.79	2.57	12.20	
51	2.54	3.87	.77	5.44	6.59	13.81	-.158	6.59	2.84	13.81	
52	.83	3.36	-.68	4.30	4.97	11.81	-.047	4.97	2.47	11.81	
53	1.10	4.04	.72	4.42	5.61	13.43	-.071	5.61	2.46	13.43	
54	1.02	3.76	1.22	5.13	5.99	14.06	-.179	5.99	2.66	14.06	
55	-4.31	5.71	-3.56	4.44	8.51	14.35	-.557	8.51	3.31	14.35	
56	-4.99	5.30	-3.34	5.41	8.62	16.03	-.353	8.62	4.38	16.03	
57	.08	4.28	1.65	4.74	5.92	14.05	-.157	5.92	2.88	14.05	

MEAN DU(M/S) = .50
 MEAN DV(M/S) = .62
 SD DU(M/S) = 6.86
 SD DV(M/S) = 7.54
 R(DU,DV) = .41
 MEAN W(M/S) = 8.00
 SD W(M/S) = 6.38
 MEAN MAX(W/S) = 4.22
 SD MAX(W/S) = 17.33
 MEAN MAX(W/S) 10.47

SANTA MONICA 6HR WIND CHANGE 3-9 KM WINTER

NPNP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	3.57	5.16	5.48	4.20	.468	7.39	5.50	17.50
2	-2.81	5.13	-4.50	2.37	.920	6.79	3.32	10.83
3	-4.0	1.58	.24	1.07	.180	1.74	.63	2.34
4	-2.00	2.61	2.15	1.70	-.714	3.51	2.33	7.76
5	-7.4	2.78	-2.41	2.63	.396	3.78	2.32	7.83
6	-2.59	2.18	-1.25	1.30	-.365	3.52	1.26	5.00
7	-2.45	4.13	2.78	1.63	-.576	4.73	3.10	9.11
8	-2.38	3.34	1.94	2.85	-.414	5.00	1.02	6.84
9	3.04	3.29	1.72	2.55	.110	4.78	2.20	8.48
10	-4.07	1.06	-.87	1.43	.779	4.30	1.33	6.85
11	-1.12	3.34	1.73	4.66	.719	4.88	3.18	10.66
12	.11	5.80	1.62	2.24	-.452	5.11	3.36	9.60
13	8.06	11.11	-7.58	9.51	.494	16.11	7.33	27.23
14	-3.85	6.85	-13.59	14.58	.880	14.81	15.38	42.08
15	-.54	2.89	-3.43	3.46	-.444	4.79	2.75	7.39
16	-2.30	4.95	-3.05	6.03	.941	5.40	6.62	18.48
17	-.28	3.93	-19.61	11.97	-.366	20.54	10.74	34.47
18	-4.84	3.69	7.91	9.54	-.443	11.81	6.48	18.00
19	2.77	5.26	2.01	4.75	.512	6.32	4.15	12.66
20	1.23	3.14	-2.57	3.82	-.381	4.53	3.17	9.53
21	-5.52	4.04	3.48	2.81	-.192	7.17	3.75	14.05
22	-4.83	6.18	3.59	7.89	.205	10.07	4.93	16.69
23	-1.86	6.63	1.55	4.34	.263	6.70	4.17	12.32
24	10.09	13.20	-19.30	10.36	-.857	23.49	13.84	37.21
25	2.13	7.08	-.69	8.89	-.564	9.52	5.40	18.87
26	-4.71	2.70	-8.65	10.40	.360	11.48	8.65	25.98
27	-.76	2.34	2.12	8.55	.546	6.79	5.53	17.86
28	-3.77	4.66	-5.52	3.39	-.226	8.05	3.12	12.12
29	-.50	7.69	-4.32	8.40	-.415	9.70	6.47	20.84
30	7.00	6.83	-4.92	3.38	-.838	9.38	6.40	19.40
31	6.12	4.09	8.83	10.58	.509	12.68	8.71	24.91
32	.66	3.84	-6.89	6.46	.139	8.28	5.69	19.04
33	-1.83	4.30	-1.69	5.66	.550	6.30	3.38	12.88
34	3.31	6.44	-16.63	8.62	.683	18.38	7.57	29.03
35	-.92	7.32	1.93	5.29	-.250	7.85	3.86	15.27
36	5.58	4.64	7.11	4.55	-.108	10.22	3.98	16.23
37	1.59	2.52	-.55	2.63	.111	3.06	2.38	6.56
38	-2.72	3.05	-6.13	1.97	-.699	7.37	1.56	9.38
39	-2.17	2.58	2.62	4.52	-.552	5.28	2.83	9.56
40	-1.86	3.49	2.21	3.86	-.324	4.89	2.98	10.96
41	5.20	5.08	6.05	1.71	-.718	9.01	2.87	14.50
42	8.77	4.91	5.53	3.13	-.319	10.74	4.98	17.19
43	1.26	2.70	5.20	1.94	-.766	5.98	1.66	7.89
44	-1.16	4.11	4.26	2.41	-.133	5.77	2.57	9.79
45	-3.06	3.77	-.46	1.53	-.448	4.61	1.70	7.42
46	2.95	3.76	1.17	2.09	-.045	4.60	2.36	8.00
47	-.49	4.03	1.03	5.54	-.313	6.05	2.40	9.30
48	.69	5.39	-7.27	3.20	-.420	8.58	3.96	15.63
49	13.24	8.58	-1.68	7.33	-.722	15.48	7.45	24.27
50	1.78	4.36	5.03	4.89	.478	6.89	4.56	14.98
51	5.10	3.03	-15.31	4.17	.094	16.46	3.76	22.85
52	-5.30	2.35	1.79	4.55	-.458	7.02	2.29	10.21
53	-7.65	6.06	1.51	7.36	-.898	11.06	4.38	15.81
54	3.14	4.89	-3.59	4.64	.065	7.30	3.14	13.04
55	1.29	2.77	.77	5.02	.209	5.28	1.74	7.41
56	6.39	4.51	.19	5.03	-.561	7.61	5.07	16.99
57	2.52	1.80	5.80	6.56	-.071	7.29	5.57	17.06
58	.13	4.52	-2.46	2.90	-.897	4.89	2.83	9.62

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59	1.99	3.48	8.47	4.09	- .417	9.37	3.85	13.54
60	2.36	3.67	8.88	3.34	.815	9.75	3.50	14.76
61	- .78	4.68	- .57	1.57	- .235	4.28	2.04	6.62
62	- .45	1.50	- .74	2.10	- .645	1.23	4.25	10.96
63	.96	1.57	-3.83	4.93	.831	4.81	2.87	11.03
64	.14	2.21	-7.02	2.91	.593	7.33	4.19	16.06
65	3.62	3.69	6.77	3.70	.659	8.21	4.31	13.02
66	6.25	2.97	3.51	7.03	- .432	9.24	4.47	12.04
67	-3.44	2.30	4.58	4.27	- .634	5.98	3.12	11.68
68	-2.05	2.39	8.61	2.95	- .152	9.08	3.25	11.37
69	1.03	2.06	3.82	6.63	.582	7.08	4.86	17.15
70	-1.94	3.44	2.45	5.54	- .064	6.09	4.17	13.45
71	-11.42	7.09	3.75	5.25	- .613	12.66	7.70	28.85
72	- .75	7.68	7.01	3.54	- .056	9.53	4.86	17.15
73	4.03	3.16	5.07	2.03	- .568	7.08	2.14	10.00
74	5.16	3.40	3.16	3.95	.795	6.71	4.17	13.98
75	.28	3.37	1.23	6.19	- .486	5.63	3.81	7.90
76	.92	3.40	1.27	3.49	- .212	4.36	2.08	9.37
77	- .55	1.93	4.32	3.84	- .685	4.86	3.62	10.24
78	2.64	3.64	2.42	2.98	- .732	5.10	2.60	9.81
79	1.48	2.27	5.30	4.99	.138	6.97	2.96	6.40
80	-1.37	2.36	1.12	2.88	.115	3.41	1.99	6.54
81	-1.16	2.12	2.45	3.63	- .534	4.30	2.16	8.91
82	1.10	2.97	3.12	4.07	- .493	5.35	2.17	7.58
83	2.21	2.98	.68	4.22	- .684	4.82	2.42	12.03
84	4.19	4.35	2.03	2.65	- .495	5.59	3.85	9.31
85	3.79	3.45	2.43	2.63	- .247	5.34	3.03	4.11
86	.17	1.92	-1.15	1.75	- .090	2.40	1.26	7.52
87	.45	2.22	2.22	2.16	.450	3.10	2.29	8.44
88	2.00	3.13	.29	2.85	.475	3.72	2.57	20.52
89	-1.10	2.99	-7.41	6.97	.538	8.41	6.37	12.76
90	.58	2.25	-6.08	5.43	.008	7.77	2.74	5.22
91	-2.12	2.18	1.21	1.38	.032	2.99	1.79	8.26
92	- .37	3.61	-1.00	3.11	.765	3.84	2.62	7.39
93	4.53	2.01	1.65	1.77	- .541	5.17	1.76	26.69
94	1.08	4.65	-1.70	13.92	- .425	10.86	9.09	8.80
95	3.20	2.99	3.46	2.18	- .174	5.37	2.45	9.54
96	2.25	4.16	4.23	2.67	- .070	6.28	2.30	14.00
97	4.74	3.34	-6.56	3.26	- .474	8.41	3.98	9.74
98	3.22	1.96	4.18	3.95	- .164	6.05	3.01	12.70
99	-5.17	3.97	2.28	3.15	- .412	6.33	4.01	20.72
100	3.94	8.97	-1.48	7.16	- .898	10.49	4.91	19.62
101	2.92	3.74	10.87	8.70	.738	12.89	6.61	37.33
102	-21.67	7.39	-5.78	9.34	.936	23.73	8.47	9.53
103	-3.41	3.04	.15	3.52	.140	4.60	3.24	17.65
104	7.43	5.63	.70	3.03	.517	8.05	5.50	5.65
105	.61	1.33	3.96	1.51	- .061	4.18	1.53	5.90
106	.80	2.44	2.09	1.67	- .613	3.23	1.55	18.08
107	.92	2.83	-9.57	6.36	- .187	9.82	6.62	30.12
108	-8.89	10.09	-35.92	29.04	.977	37.44	3.72	73.22
109	4.88	4.63	- .60	10.74	.531	10.72	5.55	19.06
110	6.59	3.70	11.90	10.00	.422	15.92	5.81	22.92
111	-1.42	5.28	-16.03	9.08	.378	16.58	9.58	28.79
112	4.21	3.80	-9.35	6.35	.688	11.94	3.34	17.00
113	1.31	2.04	4.41	3.17	.466	5.27	2.55	8.10
114	3.15	5.87	1.85	2.87	.276	6.35	3.33	11.06
115	1.28	2.15	2.07	3.84	.512	4.24	2.29	7.63
116	2.19	3.48	4.66	5.15	.684	6.84	3.86	13.04
117	-3.26	3.96	1.22	2.06	.014	5.09	1.96	8.60
118	.82	2.14	- .77	6.16	.532	5.47	3.02	11.72

SANTA MONICA 6HR WIND CHANGE 3-9 KM WINTER

119	7.55	3.27	-25.12	7.78	-127	26.46	7.58	34.12
120	-4.55	5.79	9.31	9.57	-553	11.76	9.44	26.24
121	-2.80	3.18	2.72	3.75	-255	5.33	2.98	10.01
122	-2.29	3.17	4.66	3.35	.038	6.13	3.97	10.48
123	-3.92	6.13	-1.16	3.88	.871	6.95	3.57	12.72
124	4.42	2.88	4.13	3.71	-018	6.68	3.57	11.22
125	-5.71	4.01	-3.04	1.48	.574	6.70	3.83	12.69
126	-6.78	7.31	1.61	1.58	.252	7.66	6.63	16.01
127	-3.96	3.82	-3.71	2.59	.934	5.71	4.19	13.26
128	2.16	1.00	.18	3.92	.558	3.96	1.89	6.80
129	.58	4.24	7.50	2.96	-566	8.47	3.02	13.70
130	3.64	1.40	-.34	1.09	-537	3.79	1.41	5.73
131	-.61	3.71	.60	2.11	.149	3.82	1.43	6.10
132	-1.70	.80	1.02	4.44	.746	4.12	2.26	7.78
133	.75	2.98	-3.52	3.84	.878	5.23	1.88	8.50
134	-3.59	2.17	2.92	3.44	.226	5.50	2.50	10.54
135	1.10	2.86	-.30	3.48	.283	4.05	1.64	5.87
136	-.45	3.44	-1.21	3.05	.414	3.94	2.23	6.80
137	-1.29	2.51	1.15	1.82	-.314	3.05	1.50	5.82
138	2.78	1.71	-.56	3.21	.641	4.05	1.84	6.30
139	-.32	4.38	-1.66	4.17	.524	5.32	2.63	8.50
140	-.56	4.80	-.21	4.53	.121	5.98	1.48	8.45
141	-.81	2.50	-.28	4.55	-.756	4.25	2.59	9.30
142	1.35	3.05	-2.96	1.78	-.546	3.98	2.52	9.03
143	1.70	3.79	9.34	6.65	.360	10.36	6.21	17.79
144	5.59	3.25	3.02	6.46	-.306	8.50	3.87	15.25
145	-5.12	4.22	-6.88	6.03	-.785	10.38	3.80	18.47
146	1.96	4.45	-3.36	3.48	.444	5.90	2.99	9.76
147	2.17	.72	-1.16	3.61	.519	3.91	1.69	6.95
148	-5.82	3.26	-7.89	3.95	.211	10.24	4.01	14.52
149	-5.26	2.89	-2.91	3.32	.774	6.37	3.76	14.78
150	1.68	4.97	-3.71	5.49	.473	6.62	4.80	13.15
151	-3.62	4.43	3.75	2.39	-.010	6.66	2.31	9.81
152	.49	1.83	1.55	3.59	.566	3.42	2.37	7.03
153	.35	2.07	1.69	4.65	.617	4.85	1.41	7.09
154	4.71	4.76	1.49	4.31	.947	6.19	5.01	15.73
155	2.15	3.44	.45	2.87	-.867	4.27	2.10	8.59
156	.10	4.76	-.30	2.86	.562	4.66	2.36	9.75
157	8.74	2.06	-2.83	6.23	-.504	10.65	3.02	15.78
158	8.24	2.64	-6.49	5.93	-.633	10.97	5.51	20.58
159	.44	2.22	2.22	1.39	-.096	3.27	.62	4.07
160	3.54	4.10	2.24	2.29	-.602	5.19	3.33	10.92
161	1.05	2.25	-7.85	6.16	-.303	8.61	5.44	16.80
162	6.12	2.11	.40	3.59	-.214	6.92	2.30	8.98
163	.61	4.29	4.57	1.93	.124	6.06	2.01	8.78
164	4.50	5.66	9.16	.98	-.446	11.28	2.47	15.77
165	-10.92	2.47	8.25	6.07	-.378	14.27	4.90	22.02
166	-4.31	4.37	2.27	4.17	.676	6.54	3.77	11.84
167	8.36	6.89	-6.98	5.16	.854	13.09	3.55	16.88
168	10.60	6.55	1.99	6.33	.719	12.53	5.95	20.72
169	-2.64	2.43	-2.67	2.62	.493	4.25	2.85	7.44
170	-5.39	4.37	-5.35	6.98	.714	9.71	5.01	17.55
171	-1.43	1.54	-.15	2.30	-.348	2.72	1.19	4.93
172	-5.26	2.20	3.24	1.77	.513	6.55	1.62	9.19
173	-7.89	11.18	-3.16	3.31	.651	10.44	9.64	30.68
174	1.88	8.12	-14.54	9.17	-.455	16.27	9.59	34.08
175	-2.69	2.62	-.21	2.23	.071	3.70	2.07	6.14
176	-2.15	3.43	-.76	2.50	.268	4.12	2.09	7.18
177	-1.54	4.77	.11	2.31	.539	4.63	2.44	7.57
178	3.23	4.00	.16	3.20	-.288	4.98	3.09	9.37

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SANTA MONICA 6HR WIND CHANGE 3-9 KM WINTER

179	3.09	3.16	-4.87	1.72	- .073	6.45	1.79	8.33
180	4.17	4.00	-3.06	3.29	- .756	6.01	3.98	11.78
181	-7.78	7.98	-3.32	2.66	- .793	8.93	7.83	22.24
182	2.29	6.95	-7.48	5.48	- .972	10.16	5.41	17.84
183	-5.55	4.09	5.22	5.34	- .299	6.78	4.87	14.91
184	-19.28	11.55	1.36	3.79	- .628	4.97	2.94	10.37
185	-3.56	3.11	-2.41	5.02	- .892	20.46	12.36	36.37
186	-2.86	3.00	4.66	1.93	- .230	4.81	2.83	9.24
187	2.24	2.83	2.95	2.26	- .630	6.08	2.43	9.37
188	1.53	2.14	-1.84	2.95	- .336	3.92	2.30	7.01
189	2.99	3.15	-1.59	2.48	- .087	3.99	1.68	6.22
190	-14.12	4.30	8.81	6.63	- .495	4.52	2.38	8.29
191	- .03	4.87	-8.81	6.63	- .254	17.46	5.46	25.40
192	- .33	3.15	5.45	5.54	- .878	8.78	3.62	15.75
193	- .97	2.76	5.45	5.54	- .413	6.22	5.50	15.42
194	3.23	3.08	1.27	3.78	- .730	3.83	2.41	8.77
195	1.18	4.72	2.12	2.66	- .042	4.73	2.12	8.00
196	- .49	6.58	-5.48	3.58	- .041	5.98	2.72	8.99
197	-1.19	10.73	-12.74	4.25	- .645	8.23	3.52	13.14
198	-11.69	5.42	5.40	2.61	- .304	16.15	4.47	22.04
199	- .13	6.92	-2.68	3.95	- .225	5.15	2.33	8.62
200	- .67	3.54	- .52	4.69	- .603	14.99	7.16	26.36
201	3.55	2.98	2.25	3.95	- .017	5.06	1.14	6.96
202	2.95	2.79	- .07	1.19	- .875	4.95	2.62	8.77
203	3.72	3.55	- .07	4.53	- .518	3.88	2.74	7.07
204	2.75	2.75	- .07	4.53	- .499	6.01	2.44	10.06
205	-10.61	7.39	-6.55	8.75	- .017	5.93	2.88	9.68
206	3.16	7.24	6.65	14.40	- .723	5.76	2.45	9.51
207	-6.44	4.69	-9.95	3.65	- .647	14.76	7.64	24.49
208	- .87	3.32	2.78	2.67	- .545	15.16	7.41	25.36
209	-2.99	3.38	6.32	3.31	- .962	12.44	3.96	12.44
210	1.80	3.49	6.15	2.02	- .043	4.59	1.87	6.50
211	7.08	3.67	-1.71	3.84	- .586	7.54	3.61	13.07
212	-1.42	2.48	-6.10	3.84	- .437	6.99	2.67	11.41
213	-1.90	2.60	2.44	1.91	- .170	8.10	4.06	12.18
214	2.01	3.39	3.05	3.10	- .417	6.61	3.96	11.86
215	-1.63	2.90	-5.20	4.95	- .193	4.01	1.66	6.23
216	3.21	3.64	2.81	6.65	- .211	5.48	1.23	7.20
217	3.07	3.00	- .51	4.88	- .208	6.24	4.38	13.39
218	-1.63	6.25	-2.63	5.78	- .305	7.73	3.01	12.90
219	-2.91	3.28	5.74	4.35	- .682	5.47	3.03	10.30
220	-3.06	7.63	-4.40	3.89	- .718	6.45	5.92	14.73
221	7.09	3.50	5.04	2.58	- .249	7.81	6.21	12.10
222	13.18	7.68	9.55	3.89	- .590	7.65	6.21	17.91
223	5.01	4.10	2.28	5.66	- .221	9.01	3.54	13.33
224	3.25	4.66	-1.35	3.49	- .058	16.89	8.21	29.00
225	- .55	3.69	4.75	2.77	- .124	6.56	3.76	11.74
226	4.77	1.80	-1.39	5.26	- .032	5.30	3.35	12.41
227	2.19	2.91	-2.77	3.98	- .688	6.75	3.84	11.31
228	3.32	2.07	-2.02	2.52	- .185	6.52	2.79	9.32
229	2.13	2.37	2.23	1.09	- .802	4.41	4.02	13.37
230	5.46	1.88	2.19	2.56	- .586	3.22	1.84	6.09
231	1.00	2.41	2.59	3.68	- .185	3.02	1.23	5.03
232	4.95	2.45	4.54	2.05	- .525	6.39	1.67	8.50
233	-3.96	2.76	4.54	3.54	- .347	4.16	2.86	9.52
234	-1.72	2.58	1.79	3.24	- .463	5.47	2.06	8.33
235	-3.34	7.03	1.79	3.77	- .201	6.54	3.55	9.77
236	3.75	5.52	1.79	3.83	- .356	3.86	1.87	6.00
237					- .512	7.00	4.82	17.35
238					- .806	5.71	4.88	16.00

SANTA MONICA 6HR WIND CHANGE 3-9 KM WINTER

239	- .42	1.92	3.89	2.60	- .262	4.49	2.20	7.57
240	1.60	2.54	3.59	2.75	- .320	4.89	2.03	7.89
241	-2.39	2.54	3.26	3.42	- .508	5.38	1.85	7.76
242	2.58	2.08	2.37	3.42	- .240	4.10	2.20	6.50
243	1.57	2.17	3.48	3.14	- .966	5.05	1.33	7.13
244	2.13	2.58	4.97	3.68	- .336	6.09	3.34	10.81
245	-4.45	10.62	-2.90	6.21	- .811	10.99	6.57	21.04
246	7.09	5.82	1.61	2.14	- .241	7.68	5.60	17.22
247	- .15	2.65	-2.14	3.49	- .192	3.83	2.73	8.88
248	1.53	2.57	.60	3.68	- .741	3.98	2.21	7.56
249	- .07	3.18	-1.21	2.44	- .748	3.21	2.40	8.10
250	-1.87	3.55	-3.91	2.25	- .029	5.02	3.20	10.01
251	-4.70	2.72	- .04	3.49	- .558	5.68	2.77	9.00
252	-2.46	5.50	.27	5.65	- .029	6.94	3.63	11.15
253	-1.84	5.89	-1.09	2.28	- .076	5.64	2.84	10.45
254	- .66	2.84	-1.52	2.76	- .122	3.29	2.51	8.25
255	- .88	2.39	1.43	2.62	- .487	3.63	.66	4.52
256	1.98	2.07	-4.22	2.91	- .236	5.14	2.69	10.06
257	4.56	2.81	- .05	2.60	- .007	5.32	2.43	8.28
258	5.42	3.19	-1.57	4.04	- .732	6.82	3.07	11.00
259	1.29	1.37	-5.85	8.17	- .336	7.67	6.48	17.08
260	- .50	4.61	-5.41	4.34	- .303	7.07	4.02	11.48
261	5.62	6.82	8.70	8.25	- .542	11.73	8.91	27.28
262	3.56	6.43	-4.30	7.06	- .220	9.64	4.39	16.02
263	.56	3.42	.03	4.43	- .703	5.03	1.46	7.05
264	3.47	3.84	-2.44	2.68	- .496	5.90	1.53	8.82
265	-5.68	4.41	2.68	6.68	- .893	8.89	4.23	17.72
266	1.97	3.13	5.51	3.96	- .124	6.74	3.55	14.51
267	-4.56	5.95	5.54	6.02	- .405	9.51	5.12	17.97
268	-2.36	4.50	- .41	1.81	- .594	4.35	2.84	10.08
269	- .57	3.67	7.20	2.32	- .001	7.93	2.53	11.82
270	.59	3.57	3.19	5.73	- .214	6.48	2.97	10.88
271	-3.35	3.79	-2.54	4.19	- .389	6.31	2.47	9.89
272	-3.22	1.98	-11.61	6.51	- .269	12.30	6.25	22.99
273	- .83	2.19	.72	6.59	- .802	6.03	2.69	10.43
274	-1.08	1.24	3.69	3.17	- .448	4.42	2.46	7.11
275	.41	2.16	1.88	5.34	- .070	5.03	2.82	11.14
276	- .98	2.28	3.81	4.49	- .419	5.65	2.48	8.82
277	-1.34	2.19	.30	2.65	- .317	3.22	1.39	4.61
278	-2.22	2.07	.38	1.30	- .092	2.92	1.39	5.00
279	3.37	6.87	-3.06	3.81	- .710	6.63	5.89	16.08
280	-4.56	3.47	4.03	5.85	- .700	6.89	5.84	17.27
281	5.49	2.45	- .34	5.69	- .120	7.55	2.70	10.06
282	- .17	1.93	3.08	1.71	- .291	3.66	1.45	6.19
283	1.27	1.96	3.55	3.96	- .443	4.97	2.69	8.32
284	3.65	1.90	1.12	2.54	- .439	4.54	1.74	6.79
285	-7.95	7.61	4.77	3.60	- .385	10.95	5.60	22.08
286	-10.18	10.21	7.40	4.33	- .009	14.19	8.54	28.31
287	-6.32	3.07	7.70	6.29	- .311	11.26	4.09	17.81
288	-8.72	6.75	8.83	7.21	- .532	13.64	7.76	28.70
289	.08	3.13	3.19	1.56	- .764	4.13	2.05	8.41
290	.75	2.25	1.76	2.26	- .908	2.96	2.06	5.95
291	- .54	2.01	1.51	2.15	- .162	2.67	1.83	5.63
292	3.35	1.98	- .86	2.52	- .012	4.23	1.83	6.00
293	-1.46	2.37	-17.74	5.46	- .550	17.90	5.56	24.71
294	11.63	8.69	-29.72	13.16	- .311	32.75	13.64	47.38
295	2.05	2.28	.32	5.47	- .071	5.35	2.58	8.53
296	5.95	4.23	8.72	4.00	- .488	11.07	4.58	16.40
297	5.75	6.01	3.16	5.62	- .783	9.60	3.21	14.54
298	2.90	3.17	3.36	1.63	- .127	5.19	2.08	7.84

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SANTA MONICA 6HR WIND CHANGE 3-9 KM WINTER

299	3.66	7.30	-6.34	5.81	.312	11.08	2.51	14.34
300	.51	7.54	-2.10	2.75	.492	6.97	3.64	13.04
301	-7.27	6.07	-3.96	3.82	.418	9.87	4.21	17.71
302	1.31	2.99	-8.36	2.45	.185	8.88	2.52	11.56
303	-7.89	4.21	-1.87	10.15	-.504	12.22	4.82	18.83
304	9.23	3.06	-14.22	8.43	.734	18.12	5.70	27.50
305	-2.51	2.03	4.29	3.06	.467	5.63	2.31	8.10
306	2.60	1.39	2.20	1.17	-.080	3.67	1.07	4.95
307	-4.96	3.56	-2.28	2.20	.119	6.14	2.88	10.79
308	2.59	3.03	.20	3.73	-.465	4.83	1.95	6.34
309	-5.46	6.48	-.76	2.58	-.899	7.08	5.06	17.42
310	-7.74	2.76	-2.40	3.33	.481	8.46	3.44	12.91
311	-2.43	4.35	4.08	1.40	-.235	6.05	2.11	10.36
312	2.50	4.64	8.68	4.56	-.031	9.88	4.86	14.13
313	8.17	3.97	-2.10	3.90	.041	9.17	3.99	13.90
314	1.58	5.12	-2.34	3.22	.034	5.66	2.93	9.40
315	-5.60	3.01	5.14	3.65	.399	8.47	2.47	11.32
316	-.80	4.56	2.39	4.24	.167	5.91	2.33	7.68
317	2.29	3.54	2.16	3.03	-.071	4.99	2.05	9.06
318	1.82	3.67	5.19	2.33	-.067	6.36	2.64	9.30
319	1.02	2.43	4.54	3.83	-.565	5.60	3.02	11.00
320	5.94	4.11	7.54	5.69	-.852	9.85	6.61	20.16
321	-.55	3.39	4.78	2.30	-.288	5.75	2.29	8.30
322	3.04	2.88	3.35	3.47	-.742	5.93	1.77	8.52
323	-7.47	5.33	-2.19	4.26	.145	10.15	4.98	17.66
324	-7.67	4.22	-2.19	4.10	.829	8.97	3.86	13.19
325	2.10	5.98	-2.28	6.04	.410	7.93	3.20	11.68
326	1.65	5.93	5.02	7.54	.158	9.76	3.66	16.16
327	-.78	2.99	.35	3.14	.197	3.64	2.07	6.30
328	8.03	5.71	3.95	5.82	.919	7.17	7.17	19.68
329	-3.33	2.16	6.05	5.97	-.136	7.89	4.84	17.43
330	-1.63	3.36	-4.95	6.67	-.045	7.11	5.33	15.16
331	-2.05	5.04	6.22	4.89	-.413	7.90	5.17	15.38
332	.71	4.44	1.97	1.56	-.150	4.29	2.42	8.25
333	-2.67	3.45	-5.36	5.38	-.406	7.59	3.94	13.84
334	-3.04	5.35	3.07	3.79	.496	6.91	3.01	12.15
335	2.33	3.65	1.84	6.42	-.529	7.27	1.78	10.10
336	1.56	2.34	4.13	3.97	.868	5.61	2.70	8.42
337	-4.00	2.99	1.79	4.65	-.233	6.17	2.91	10.21
338	2.94	2.72	7.39	5.14	.594	8.29	5.25	15.90
339	3.21	2.12	3.83	2.51	.573	5.31	2.66	9.21
340	2.01	1.76	.67	2.87	-.494	3.58	1.26	5.40
341	-8.96	3.81	-21.06	7.60	.450	23.06	7.92	33.24
342	-.38	3.57	8.18	6.64	.331	9.02	6.35	17.68
343	-3.71	2.71	-22.42	10.75	.040	22.89	10.69	36.57
344	7.64	7.33	-10.72	7.09	-.692	14.08	8.64	25.52
345	-6.64	7.58	.09	9.71	.659	12.49	4.60	20.15
346	-4.30	6.52	.63	5.90	.454	8.07	4.84	17.25
347	-5.64	5.92	.25	1.97	.110	7.50	3.25	11.47
348	1.30	1.58	2.64	4.42	.087	4.60	2.74	9.08
349	-3.01	2.04	3.93	3.36	-.180	5.52	2.91	9.18
350	3.91	2.36	4.21	4.12	.502	6.32	3.80	12.79
351	1.40	4.34	-12.03	6.56	-.586	12.77	6.53	21.86
352	-3.73	2.47	-.62	7.10	-.593	6.86	4.27	14.00
353	-.16	1.65	.63	1.02	-.045	1.73	.87	3.30
354	1.45	1.53	-.10	1.48	-.481	2.14	1.28	3.85
355	.41	2.26	-5.54	4.09	.030	5.87	4.19	13.00
356	-.22	3.17	-.54	2.45	-.515	3.38	1.78	6.00
357	4.94	2.38	9.38	5.90	-.054	11.42	4.40	19.37
358	4.22	3.39	4.83	7.94	.523	8.47	6.23	19.52

SANTA MONICA 6HR WIND CHANGE 3-9 KM WINTER

359	-4.36	8.43	1.38	6.33	.208	9.82	4.79	18.15
360	-7.76	2.58	2.58	7.62	.559	10.74	3.43	14.71
361	4.16	8.01	-3.53	9.00	.795	12.27	2.07	15.81
362	1.86	4.99	.62	4.77	.870	5.78	3.63	11.73
363	1.37	2.93	3.65	2.23	.324	5.11	.89	6.37
364	.66	3.57	-2.01	6.39	.593	4.90	5.55	16.27
365	.18	3.49	-5.34	2.95	-.409	6.38	2.59	10.20
366	-2.13	3.63	-13.27	3.58	-.397	13.88	3.43	16.87
367	2.04	1.66	6.84	4.08	.530	7.27	4.15	12.69
368	-5.58	6.90	8.27	8.97	.643	13.98	4.00	20.15
369	-5.96	2.35	-5.89	2.77	.850	8.44	3.47	15.24
370	-8.41	5.52	-6.96	2.11	-.140	11.68	3.86	15.62
371	.47	1.00	4.17	3.45	.079	5.12	1.70	6.97
372	3.91	2.29	3.10	1.97	-.229	5.51	1.66	8.71
373	-5.38	3.95	-2.77	4.30	.492	7.02	4.38	13.22
374	-1.81	7.78	-5.67	3.75	.754	7.92	6.54	21.98
375	3.02	3.94	-.36	1.95	.621	4.04	3.33	10.76
376	-1.28	3.37	-1.93	2.03	-.474	4.03	1.67	5.15
377	-2.05	2.23	1.30	1.43	.172	3.14	1.56	5.28
378	-.85	3.94	3.42	2.25	.031	5.12	2.12	8.02
379	-.56	4.47	-1.92	2.42	-.685	4.78	1.96	8.72
380	-.30	4.06	-.40	2.40	-.655	3.97	2.03	7.48
381	-2.55	2.55	-7.89	8.89	-.162	9.13	8.27	25.96
382	1.91	3.59	9.84	4.60	-.540	10.60	4.49	18.00
383	2.92	3.52	-1.75	2.50	-.331	4.72	2.48	8.76
384	4.47	7.16	-3.55	4.24	-.802	7.56	6.37	20.00
385	4.35	3.35	4.31	2.78	.040	6.78	3.02	11.34
386	3.00	3.78	-3.89	3.77	-.724	5.86	4.06	12.97
387	-.50	3.62	-4.23	2.56	-.502	5.34	2.74	8.55
388	-3.00	1.66	2.06	2.32	.240	4.20	1.74	6.15
389	-4.71	1.98	-2.05	5.62	.454	6.56	4.01	14.75
390	3.16	4.74	4.84	4.84	.458	7.13	5.05	16.31
391	-7.13	6.21	-6.39	6.19	.747	10.93	6.65	18.83
392	1.48	5.59	2.32	3.39	.907	6.20	2.58	10.09
393	6.01	3.43	-.37	4.64	-.107	7.78	2.22	11.21
394	6.71	4.67	-.83	2.73	.220	7.70	3.67	13.45
395	2.99	5.68	-9.15	6.79	.806	11.85	4.75	17.92
396	-1.58	6.42	-6.11	8.70	.699	9.71	7.32	25.58
397	.17	2.62	-1.33	2.12	.854	3.26	1.04	4.65
398	4.85	1.35	-.16	2.28	.344	5.33	1.12	6.34
399	1.22	2.47	2.71	1.55	.498	3.79	1.41	6.19
400	1.01	5.05	-.26	4.04	.929	5.45	2.90	9.80
401	-9.00	3.43	-7.01	7.06	-.207	12.89	4.43	20.75
402	-6.44	6.31	6.38	6.31	.185	11.44	4.77	19.12
403	-7.64	6.98	2.56	3.31	.750	9.40	5.68	17.00
404	2.83	3.62	.70	1.95	.861	3.92	2.97	9.25
405	4.08	3.70	2.29	2.68	-.183	5.88	2.47	10.01
406	2.96	8.93	-6.64	10.33	.836	12.61	7.92	25.39
407	-9.94	3.68	-4.40	6.28	-.013	12.34	3.66	18.50
408	-5.07	6.30	-.26	8.44	.830	10.55	3.35	17.41
409	-26.35	2.32	-13.75	9.34	.205	30.76	4.42	35.70
410	-8.25	6.37	-6.78	4.30	-.240	12.00	4.90	19.04
411	2.41	4.17	-.90	2.99	-.204	4.65	2.98	9.80
412	3.83	2.85	-.29	1.24	.259	4.36	2.15	8.50
413	-3.85	2.25	-2.33	1.47	-.240	4.82	1.93	7.22
414	-1.34	1.21	4.02	2.94	.661	5.13	.58	6.00
415	9.44	4.15	3.33	1.80	-.164	10.31	3.65	13.55
416	2.52	4.25	1.04	2.73	-.291	4.63	3.03	9.91
417	5.38	5.01	11.29	6.60	.539	13.74	5.57	20.89
418	2.48	2.76	3.92	3.95	-.871	6.33	1.27	8.09

419	11.99	6.10	2.87	5.08	- .655	13.66	4.77	20.00
420	-2.08	4.07	-4.42	6.51	.560	7.29	4.97	15.10
421	-10.12	5.78	-8.56	7.74	.926	13.76	8.80	24.81
422	-15.36	8.16	-10.12	6.65	.963	18.83	10.43	32.21
423	3.22	4.07	-1.09	5.29	-.523	6.88	1.65	9.26
424	-2.79	4.73	-1.68	1.83	-.827	4.98	3.03	10.34
425	3.05	3.45	-3.29	3.96	-.220	6.01	2.98	10.44
426	-2.05	4.10	-17.86	7.34	.947	18.23	7.74	31.50
427	-1.26	2.49	2.68	3.79	.799	4.50	2.67	8.68
428	-.75	3.07	4.33	2.41	-.005	5.22	2.44	7.56
429	3.72	2.87	3.52	3.98	.695	5.72	4.07	10.94
430	2.73	7.51	-.37	6.55	.715	8.91	3.95	16.91
431	2.24	2.80	2.67	4.56	-.602	5.74	2.11	7.89
432	6.03	3.16	2.67	4.94	-.125	7.21	4.02	12.15
433	-.41	2.55	4.11	2.80	-.221	5.10	1.98	8.06
434	-.59	3.34	.77	3.60	.636	4.01	2.53	8.85
435	1.04	4.46	.78	4.06	.506	5.20	2.62	9.86
436	6.89	4.10	-.52	2.41	.253	7.23	4.16	14.06
437	-2.66	2.83	-1.52	2.30	.315	5.34	2.14	8.45
438	1.02	2.61	5.53	2.40	.687	6.02	2.69	10.10
439	-.43	1.44	6.90	2.59	.304	7.12	2.33	9.71
440	3.82	4.53	-1.93	5.07	-.488	6.34	4.56	15.11
441	-1.35	3.32	-6.28	3.45	.946	7.16	3.35	11.72
442	2.55	2.82	-.09	3.00	.411	3.91	2.57	7.82
443	-1.20	5.13	-.44	1.78	-.636	4.16	3.36	9.08
444	-1.17	2.31	-2.91	3.01	.387	4.41	1.77	7.12
445	-.54	2.30	1.20	1.43	.353	2.59	4.43	10.53
446	.57	7.17	-.33	2.11	.525	5.39	4.74	15.36
447	.74	3.64	-5.38	3.96	-.253	6.60	3.56	12.27
448	1.45	3.11	-4.42	3.20	-.106	5.44	3.26	10.58
449	1.77	5.22	8.43	5.98	-.094	10.16	5.40	20.38
450	1.62	3.01	-.74	2.65	.327	3.81	1.68	5.78
451	-1.89	2.53	-.89	3.42	-.096	4.17	1.70	7.09
452	-2.91	6.11	-2.28	4.91	-.561	7.21	4.08	14.17
453	.67	2.13	6.76	2.82	.123	7.08	2.81	10.53
454	.26	2.02	4.96	4.72	.807	5.48	4.49	14.66
455	.00	4.09	2.42	3.73	-.732	4.92	3.03	10.84
456	4.12	3.49	-2.58	4.33	-.912	6.30	3.50	13.22
457	-4.49	3.30	4.37	5.71	.840	8.09	3.59	15.58
458	-1.53	2.89	2.06	2.12	-.346	3.50	2.49	8.13
459	.99	2.29	4.47	2.43	-.291	5.18	2.08	7.97
460	-6.43	5.47	2.28	1.36	-.315	7.73	4.05	13.63
461	-6.13	4.58	4.17	5.42	.578	9.02	4.43	14.86
462	-4.82	3.98	3.19	4.22	-.271	7.05	3.84	12.70
463	5.20	4.46	.51	11.66	-.483	11.15	6.52	20.35
464	5.60	4.73	5.38	2.42	-.395	8.91	2.42	13.28
465	-.34	3.59	2.16	2.20	.437	3.79	2.57	7.82
466	-1.09	4.38	2.30	2.40	.748	4.15	3.52	10.01
467	.55	2.93	.53	3.26	.588	3.69	2.01	5.96
468	-.08	1.39	2.98	2.07	.277	3.24	2.09	6.50
469	1.51	4.78	-2.33	3.75	.287	5.68	2.88	9.52
470	-2.72	2.47	1.34	4.46	-.058	5.19	2.31	7.33
471	-.62	4.66	2.27	4.48	-.556	5.10	4.23	13.40
472	3.79	1.54	.44	3.12	-.001	4.62	2.04	6.77
473	-.92	4.17	-3.63	5.65	.100	6.86	3.27	12.94
474	9.20	11.08	-7.71	13.30	-.501	16.77	11.82	33.12
475	.75	1.88	7.31	4.47	.115	7.66	4.26	13.45
476	-6.13	1.64	4.50	2.79	.380	8.05	1.55	10.65
477	5.01	2.01	4.58	1.75	.205	6.95	2.13	10.29
478	7.17	3.84	11.75	4.58	.151	14.16	4.77	19.15

ORIGINAL PAGE IS
OF POOR QUALITY

SANTA MONICA 6HR WIND CHANGE 3-9 KM WINTER

479	2.76	3.17	3.39	3.19	-4.16	5.73	2.06	8.90
480	3.21	4.07	-3.04	4.52	-260	6.58	3.05	10.74
481	-17.81	3.99	4.21	3.04	-283	18.47	4.23	24.50
482	5.10	3.42	-16.42	5.88	-311	17.77	4.79	24.90
483	-3.33	2.65	3.68	1.36	-329	5.38	1.97	8.70
484	-2.48	2.49	-47	1.28	-105	3.19	1.84	6.17
485	1.65	5.76	-88	5.24	-771	5.96	4.82	15.48
486	1.89	6.64	6.54	7.06	-251	10.30	4.93	17.52
487	-3.13	2.17	3.66	2.17	-195	5.13	2.43	9.38
488	.24	2.01	1.98	3.70	-495	3.88	2.20	5.96
489	6.98	14.49	-3.72	5.75	-645	13.36	10.38	31.21
490	.47	3.63	-3.62	3.66	-556	5.45	2.74	9.00
491	-1.10	1.38	1.97	3.83	-037	4.01	1.94	7.11
492	.32	2.42	-1.24	4.95	-129	3.87	3.85	12.00
493	1.48	5.21	1.74	5.07	-538	5.83	4.39	13.75
494	-1.93	5.00	-73	2.25	-089	4.72	2.99	10.01
495	-8.55	4.80	12.00	6.47	-947	14.81	7.90	25.27
496	-3.80	2.71	9.49	2.83	-146	10.57	2.67	13.64
497	.90	1.64	.49	3.51	-138	3.41	1.63	5.71
498	3.79	3.16	-8.56	5.33	-207	10.07	4.74	16.15
499	1.90	4.15	.44	2.26	-886	3.26	3.80	11.53
500	.71	1.34	2.47	2.97	-741	3.64	1.69	6.65
501	-1.21	3.74	-3.06	2.05	-039	4.65	2.37	7.76
502	-1.73	3.30	-4.37	3.01	-530	5.29	3.60	12.29
503	-1.75	3.67	-1.82	2.28	-669	3.84	2.98	9.85
504	2.95	2.84	2.25	2.89	-688	4.31	3.28	8.40
505	-2.89	1.51	2.02	2.45	-370	3.76	1.24	5.52
506	1.02	1.53	.46	2.49	-469	2.51	1.64	6.16
507	-5.85	1.92	2.16	4.52	-045	7.46	2.13	10.05
508	-.37	6.00	1.91	3.12	-173	5.27	4.21	13.67
509	2.70	3.34	-5.34	2.52	-843	6.99	1.50	8.60
510	-6.01	4.89	-6.70	4.60	-681	10.02	4.75	16.80
511	-7.60	5.13	-15	4.22	-733	9.01	4.11	14.75
512	-1.08	3.74	6.48	4.90	-362	7.90	3.93	11.91
513	.93	3.54	-2.03	1.68	-736	3.92	1.80	6.66
514	1.62	3.58	1.29	3.89	-227	4.61	2.85	8.78
515	-2.53	2.61	2.60	2.11	-729	4.67	1.11	6.46
516	2.05	2.75	2.73	3.22	-597	4.82	2.10	7.67
517	-2.19	3.26	5.50	7.23	-259	8.53	4.34	16.11
518	4.65	3.84	-3.29	3.44	-611	6.40	4.09	13.06
519	-1.83	3.90	2.62	1.99	-680	4.62	2.49	8.03
520	4.73	3.31	.26	2.26	-260	5.36	2.96	10.02
521	1.16	2.06	-3.05	1.82	-651	3.63	2.14	6.60
522	1.53	3.26	2.43	2.50	-495	3.81	3.08	8.34
523	-4.22	3.89	1.43	3.09	-835	5.50	3.55	13.25
524	-7.94	3.00	-5.40	1.66	-189	9.84	2.51	13.23
525	-4.67	7.77	-7.35	4.20	-692	9.79	7.39	24.15
526	-1.53	3.73	-7.06	4.12	-237	8.15	3.77	15.58
527	3.04	3.80	3.23	3.31	-380	6.10	2.22	10.40
528	-3.71	4.63	-3.08	3.81	-777	5.53	5.23	13.18
529	-4.06	3.32	1.67	2.14	-326	5.23	2.49	8.04
530	-3.02	1.70	5.03	3.25	-607	6.02	3.38	10.10
531	-5.04	2.65	1.69	3.82	-292	6.16	3.21	11.91
532	-2.26	2.23	-1.17	1.73	-292	2.90	2.05	6.43
533	-2.19	4.29	3.75	2.56	-572	5.34	3.69	12.39
534	2.55	2.38	2.36	1.85	-233	4.07	1.95	6.18
535	-3.15	6.80	-10.05	4.95	-755	12.63	3.71	17.21
536	-5.50	4.94	-1.90	4.44	-045	7.33	4.57	13.30
537	-2.23	2.50	1.36	2.95	-399	3.98	2.13	7.80
538	2.90	2.36	1.71	2.25	-107	4.17	1.89	7.34

539	-1.57	2.19	-1.94	2.68	.306	2.80	2.06	5.73
540	.92	1.21	-1.73	2.26	.521	2.55	2.80	6.03
541	1.07	3.04	-1.33	1.16	.106	2.91	1.48	6.03
542	3.01	2.83	2.93	1.26	-.263	4.71	2.07	7.83
543	-1.60	2.99	-5.82	2.22	-.589	6.63	1.59	8.88
544	1.97	3.84	-1.03	5.05	.312	5.90	2.31	9.20
545	2.69	1.27	.06	2.50	.390	3.58	1.16	5.05
546	3.70	1.31	2.65	2.81	.149	5.01	2.12	8.89
547	-3.74	5.10	-2.31	6.61	.616	8.54	2.69	13.37
548	-4.64	3.89	1.55	2.80	.227	5.95	3.08	10.10
549	-.04	4.19	-12.09	2.85	.020	12.74	2.61	17.56
550	-.29	3.02	.04	3.92	.088	4.10	2.23	7.05
551	5.50	5.35	1.75	3.35	.338	6.99	4.66	14.55
552	-2.08	3.49	-2.33	2.66	-.184	4.40	2.83	7.98
553	-6.34	6.81	-9.32	5.70	.198	12.66	6.32	20.55
554	13.17	5.22	11.47	5.91	-.645	17.78	7.02	30.28
555	2.93	3.89	3.72	3.11	-.323	6.14	2.65	9.50
556	5.64	2.88	-4.26	3.00	-.364	7.39	3.44	11.54
557	-1.86	1.48	1.90	3.83	.757	4.02	2.51	9.43
558	-1.26	3.66	3.00	2.07	-.071	4.25	2.99	9.13
559	-.27	1.79	-4.20	3.67	.778	4.65	3.47	11.44
560	5.37	2.83	-2.36	3.26	.710	6.72	2.48	11.15
561	.49	2.10	1.18	2.54	.661	2.94	1.64	4.52
562	2.17	1.28	2.87	1.84	-.130	3.92	1.48	6.14
563	4.57	6.68	-12.95	16.47	-.837	16.78	14.39	37.12
564	-1.22	6.06	4.88	14.05	-.346	13.88	6.22	22.78
565	-2.77	4.66	-.97	8.14	-.218	7.73	5.33	17.03
566	-5.46	1.61	9.56	4.93	.493	11.57	3.46	17.74
567	-2.25	2.30	-1.13	1.22	-.502	2.85	1.78	6.18
568	-3.21	3.00	1.47	1.90	.065	4.51	1.86	6.49
569	2.86	1.72	-.27	3.06	.296	4.26	.87	5.25
570	-.44	2.79	-5.35	5.51	-.844	6.33	5.00	15.17
571	-3.59	2.08	-7.73	6.24	-.500	8.93	5.91	18.23
572	-2.88	3.05	9.87	2.27	-.544	10.73	1.88	13.10
573	-1.09	13.64	.28	3.86	-.387	11.96	5.95	22.00
574	-16.41	7.46	-7.40	5.90	-.046	19.20	6.22	27.80
575	-.64	1.84	2.39	1.78	.261	3.23	1.24	5.69
576	-4.29	2.61	-4.51	5.99	.316	7.33	5.02	17.04
577	-1.34	2.93	.86	2.70	-.507	3.68	1.75	5.78
578	1.19	1.39	-.99	3.41	-.396	3.36	1.78	7.11
579	-11.23	6.58	-1.00	3.56	.922	11.77	6.55	22.24
580	-8.81	8.28	.22	2.21	.755	9.26	8.00	22.48
581	-1.84	7.96	11.44	5.03	.612	14.02	3.98	18.49
582	11.98	2.79	-.97	2.86	.032	12.31	2.80	17.05
583	-12.32	13.60	-6.26	7.21	.978	14.48	14.66	35.85
584	-12.50	12.05	-10.02	9.19	.965	16.43	14.64	36.33
585	-4.91	4.27	-1.10	2.21	-.162	6.06	3.14	10.63
586	5.51	4.08	9.98	12.01	.207	13.84	9.43	27.34
587	-1.70	1.88	-2.45	1.87	-.462	3.56	1.62	5.47
588	-3.50	2.55	2.99	3.69	-.812	5.60	2.88	9.59
589	-1.99	3.24	7.76	2.93	-.230	8.55	2.94	12.41
590	.77	1.87	4.34	3.61	.225	4.87	3.40	8.73
591	-4.12	4.73	2.04	1.59	.456	4.73	2.85	9.87
592	-.30	3.05	-.15	4.29	.658	5.96	1.33	5.67
593	-9.34	2.38	-7.83	4.72	.014	12.79	3.24	17.35
594	2.45	5.47	-9.89	13.87	.814	13.32	11.69	31.02
595	-13.25	1.34	1.10	9.94	-.415	16.07	2.36	19.43
596	-5.65	4.52	9.27	8.02	-.359	13.40	3.57	17.15
597	-2.05	1.77	3.02	2.31	-.709	3.92	2.46	6.22
598	.02	1.60	1.20	2.60	.114	2.84	1.25	4.67

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599	- .53	2.73	2.90	1.50	- .365	3.96	1.25	5.59
600	6.98	9.72	3.34	5.33	- .848	10.84	7.46	27.34
601	-1.57	2.41	2.68	2.90	.295	4.06	2.50	7.83
602	- .58	1.56	2.18	1.63	.492	2.81	1.34	4.27
603	.33	4.32	-1.15	4.27	.386	5.51	1.78	6.87
604	1.92	5.69	- .38	7.28	.237	7.67	4.62	14.02
605	-12.48	6.16	1.29	6.12	- .210	13.85	5.94	21.96
606	-5.77	7.59	-16.04	10.35	.508	17.91	11.39	34.70
607	1.08	5.55	8.92	6.94	.490	10.35	6.94	24.58
608	3.92	3.37	-3.99	7.56	-.098	8.95	3.37	11.62
609	-4.20	3.69	4.09	2.47	-.068	6.68	2.78	11.66
610	10.06	10.53	4.42	4.58	-.728	13.16	8.41	31.23
611	-9.45	9.91	-19.89	7.35	.216	23.23	9.41	37.41
612	-1.16	6.25	6.50	4.92	-.535	9.47	3.07	14.54
613	- .72	2.43	2.67	1.80	.489	3.60	1.71	5.57
614	-3.51	3.46	.41	1.93	.000	4.25	3.02	8.01
615	-3.24	2.63	8.16	3.30	.083	9.27	2.76	12.20
616	2.66	2.24	9.20	3.23	-.419	9.98	2.48	14.31
617	-10.74	3.36	4.13	2.72	-.263	11.71	3.62	14.63
618	-4.08	5.04	2.33	1.96	.788	6.42	2.62	10.89
619	6.61	5.76	2.34	2.09	-.343	7.68	5.11	16.94
620	4.98	2.53	6.52	3.22	.300	8.50	3.32	12.78
621	.97	2.11	1.48	5.89	.579	5.36	3.05	11.13
622	-1.99	4.29	-11.47	4.63	.851	12.54	3.83	17.07
623	1.24	4.92	-5.38	5.86	-.692	7.37	5.54	19.15
624	3.87	2.09	1.55	2.50	-.061	4.67	2.33	7.97
625	2.12	9.48	-4.26	3.24	.851	9.49	4.67	15.59
626	-10.05	5.77	-18.48	4.83	.456	21.43	6.08	27.04
627	-4.03	2.58	2.68	2.41	-.909	5.03	3.20	8.09
628	2.90	2.31	1.17	1.71	-.659	3.90	1.39	6.04
629	-8.12	7.41	-9.10	3.13	-.676	13.99	3.15	18.56
630	.68	6.85	-19.38	8.72	-.680	20.35	8.85	30.89
631	2.02	2.11	1.81	2.43	.190	3.52	2.12	5.87
632	2.83	3.78	-3.01	3.50	.808	5.99	2.13	9.76
633	-16.26	8.99	-4.35	5.12	.751	17.19	9.63	29.53
634	-5.41	3.11	-1.76	7.23	-.674	8.69	3.40	13.10
635	-2.80	2.46	4.79	8.29	.826	8.76	4.61	15.45
636	2.88	2.77	2.79	3.28	-.299	5.47	1.52	6.96
637	-.23	1.66	-5.01	4.62	.271	4.85	2.96	8.76
638	1.70	1.71	2.61	4.69	-.077	5.39	4.43	13.69
639	3.18	1.70	3.13	3.73	-.210	5.39	2.48	8.66
640	4.19	1.72	1.49	2.53	-.183	5.15	1.23	7.47
641	1.16	6.45	-.28	5.92	.748	7.53	3.48	11.88
642	6.54	3.14	-.59	5.59	.287	8.40	3.01	12.04
643	.81	2.63	4.52	2.63	.523	5.03	2.98	9.38
644	1.59	2.02	1.84	2.56	.639	3.42	1.97	6.00
645	7.31	4.64	-2.08	6.07	-.104	9.17	5.25	16.05
646	6.73	4.20	2.72	8.44	-.718	11.15	2.27	13.66
647	-10.09	3.36	.53	7.27	-.792	12.16	3.28	16.02
648	-10.01	2.41	.53	3.97	.441	10.93	2.09	14.10
649	-4.48	1.57	2.13	1.32	-.163	5.25	1.68	8.01
650	-.48	2.52	2.68	1.72	-.690	3.66	1.53	6.33
651	3.06	5.45	-2.61	5.34	-.937	6.43	5.37	14.74
652	.29	4.11	3.80	4.84	-.560	6.07	3.79	11.55
653	.82	1.58	1.30	2.29	-.378	2.81	1.13	4.09
654	3.90	2.57	-3.03	1.58	-.918	5.00	2.90	9.03
655	3.40	2.52	4.73	1.06	.473	6.06	2.04	9.24
656	5.63	2.11	-2.32	1.77	-.799	6.19	2.46	9.02
657	1.07	2.12	1.07	2.05	-.047	2.91	1.22	5.15
658	-1.23	3.08	2.00	2.82	-.054	4.33	1.40	6.78

659	-7.70	1.66	.81	1.57	-.098	7.89	1.61	9.78
660	-3.55	2.38	-1.03	2.55	-.326	4.64	1.75	6.75
661	7.68	4.73	3.62	3.88	.645	9.49	4.07	13.17
662	8.06	4.26	-.85	5.40	-.179	9.60	4.05	14.40
663	7.00	3.74	1.11	1.14	-.580	7.19	3.69	15.27
664	-1.67	4.14	-.77	4.47	-.241	4.86	3.67	11.00
665	4.65	2.52	1.33	1.93	-.207	5.18	2.46	10.07
666	3.84	3.54	-3.33	2.48	-.498	6.04	2.50	10.88
667	3.84	4.47	4.09	5.30	.713	6.85	5.47	16.10
668	1.87	3.43	4.91	3.79	.604	6.25	3.58	12.61
669	9.08	1.81	-1.59	2.60	-.297	9.51	1.88	12.72
670	10.80	4.90	-1.89	3.53	.717	11.86	3.57	17.77
671	.44	1.73	1.38	3.09	.295	3.21	1.73	5.61
672	-3.46	3.84	1.12	3.09	.715	4.21	3.44	11.13
673	.36	5.42	1.00	4.78	-.680	6.29	2.73	10.06
674	-1.90	2.58	.29	3.48	-.322	3.79	2.51	6.90
675	.31	3.26	1.68	1.89	-.192	3.60	1.58	5.96
676	1.52	4.59	-.42	3.33	-.600	4.02	4.03	12.56
677	2.55	2.25	-1.36	3.63	-.492	4.44	2.24	7.53
678	-3.56	2.49	-3.10	2.71	.112	5.18	2.87	9.87
679	.33	2.54	1.41	1.52	.146	2.54	1.92	5.24
680	4.53	2.77	-2.03	5.59	-.392	6.53	4.23	13.74
681	.82	.88	2.38	4.03	.079	2.31	7.87	7.87
682	3.25	3.74	4.09	5.47	-.052	6.19	3.40	10.15
683	-2.01	4.23	-10.07	3.22	.015	11.04	5.33	20.82
684	-1.21	4.77	.30	8.73	.568	7.10	6.48	20.10
685	.64	2.16	2.21	3.18	.246	2.21	2.21	6.11
686	1.01	5.14	.52	6.01	.699	6.25	4.30	13.68
687	-.25	1.58	-2.29	2.01	-.727	2.95	1.61	6.08
688	.64	2.04	-1.54	2.54	-.058	3.21	1.34	4.69
689	-.22	2.02	1.32	4.52	-.637	4.55	1.56	7.46
690	2.27	3.17	-4.02	4.94	.413	5.82	4.46	14.38
691	2.91	3.01	-3.82	4.05	-.607	5.28	4.46	13.06
692	-4.85	5.51	4.61	5.31	-.610	7.93	6.13	15.91
693	-4.88	7.37	-12.05	2.99	-.074	14.31	4.64	21.93
694	-2.08	3.55	-7.54	7.17	.228	9.56	5.35	18.87
695	2.37	3.49	.32	3.03	.625	3.99	3.08	9.13
696	4.03	1.03	.51	2.10	-.265	4.49	1.07	6.02
697	-1.06	2.81	-2.36	2.91	.734	3.62	2.97	8.29
698	1.34	2.68	2.76	8.77	.882	7.81	4.91	14.09
699	2.51	1.79	2.00	2.54	-.066	3.89	2.01	5.80
700	5.84	2.14	-.94	2.02	.501	6.28	1.88	9.65
701	1.34	1.64	-1.45	2.94	-.085	3.39	1.56	5.23
702	3.03	2.74	.04	2.85	.378	4.37	2.03	7.41
703	-4.68	2.20	1.74	1.91	.695	5.53	1.35	6.92
704	-.79	2.88	2.62	1.57	-.570	3.69	1.89	6.04
705	-.76	1.87	-1.07	2.28	.442	2.88	1.01	4.54
706	.50	1.86	-2.87	3.77	-.218	3.42	1.90	6.99
707	1.42	3.02	2.59	4.05	-.073	5.04	1.97	7.47
708	4.61	2.49	2.46	1.28	.316	6.35	2.71	11.10
709	-1.70	1.79	-1.65	2.33	-.108	2.53	1.10	4.34
710	.23	1.56	5.13	3.89	-.417	2.86	1.66	5.12
711	3.33	1.11	.83	4.70	.616	2.27	2.27	9.44
712	2.65	3.08	-.65	1.73	-.096	5.37	2.59	8.63
713	-.06	1.19	-.57	2.40	-.101	1.76	1.27	4.22
714	.23	2.31	-.57	2.76	-.162	2.52	1.68	5.41
715	-.29	1.30	-.30	3.90	-.208	3.80	1.56	5.52
716	-.31	1.61	3.20	1.82	.666	3.06	1.08	5.32
717	.41	2.47	-2.30	1.87	-.653	4.03	1.62	6.77
718	1.57	1.87	-2.30	1.87	-.653	3.06	2.27	6.50

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719	-1.53	2.88	.99	3.52	-.282	3.64	3.02	9.14
720	2.02	1.41	-.25	1.73	.759	2.68	1.17	4.22
721	1.29	2.78	1.80	3.07	.663	3.96	2.15	7.18
722	.85	1.57	-.36	3.14	.444	3.07	1.53	4.97
723	1.86	1.99	1.47	2.62	-.604	3.31	2.13	6.24
724	-1.23	1.88	-4.49	3.47	-.085	5.07	3.29	9.51
725	-1.05	1.62	2.18	2.19	-.380	3.25	1.40	5.12
726	2.75	4.48	3.23	1.06	.675	5.25	3.17	11.14
727	-5.52	2.89	-3.70	6.70	-.924	9.02	3.13	13.70
728	-2.66	2.49	-.55	4.79	-.251	5.26	2.32	8.14
729	-11.89	10.57	1.47	3.65	.115	12.91	9.88	28.74
730	4.65	3.66	-3.26	3.26	.269	6.80	2.77	11.62
731	-1.59	3.30	3.57	3.62	-.035	5.57	2.38	8.35
732	.71	2.72	4.18	2.15	-.053	4.96	2.06	8.77
733	-.66	2.92	-3.11	3.86	.350	5.08	2.26	9.60
734	2.46	2.26	-.34	2.55	.702	3.71	1.65	5.64
735	.23	1.70	-.29	1.53	.648	2.03	.74	3.31
736	2.52	2.62	3.81	2.02	-.584	5.27	1.72	7.20
737	2.60	1.82	5.69	6.33	.134	7.55	4.73	13.95
738	1.77	2.13	4.04	4.92	.327	5.68	3.71	11.67
739	.22	2.87	1.76	2.75	-.538	3.85	1.48	5.26
740	2.65	1.69	1.79	3.28	.130	4.20	2.22	6.79
741	-6.22	6.12	22.08	10.20	-.273	23.71	10.00	33.38
742	-2.82	3.94	7.49	4.34	-.649	8.47	5.04	16.79
743	-.19	2.80	3.16	2.13	-.483	4.02	2.29	8.03
744	2.31	2.62	3.84	2.58	.060	4.96	2.87	8.72
745	-1.91	8.21	.75	4.37	-.120	8.37	3.09	13.96
746	.84	10.45	-3.75	4.24	-.160	9.99	5.29	18.77
747	-1.91	4.66	7.03	6.00	.667	9.15	4.68	17.19
748	-.38	4.30	9.14	2.03	-.506	10.05	1.57	11.68
749	-8.51	5.90	3.98	3.50	-.070	10.39	4.90	16.25
750	4.75	4.75	5.99	5.99	-.647	17.07	6.57	27.95
751	-2.93	1.52	5.61	2.96	.138	6.63	2.55	9.66
752	-1.52	4.04	6.18	2.01	-.864	7.24	2.52	11.08
753	-7.42	2.57	-3.44	3.92	.692	8.83	3.02	13.09
754	-4.86	6.32	-7.00	7.94	.917	9.24	9.39	25.77
755	1.34	1.98	1.98	3.73	-.820	4.28	1.77	6.33
756	1.34	1.83	2.88	1.09	.172	3.57	1.18	5.30
757	4.77	5.41	-6.33	7.79	.091	10.44	6.02	22.01
758	-.55	2.43	1.07	4.66	-.613	4.60	2.16	7.02
759	-2.66	6.69	-1.48	9.18	-.754	8.63	7.27	23.57
760	1.36	3.39	-3.18	5.95	-.255	6.45	3.53	11.21
761	.09	5.63	-1.39	4.44	.479	6.26	2.83	10.91
762	6.61	7.74	-2.03	5.33	.568	8.83	7.29	22.59
763	-4.25	.60	-6.23	4.97	.072	8.05	3.99	15.04
764	-.84	2.40	-7.43	5.10	.118	8.35	3.95	12.98
765	2.78	2.75	2.73	4.84	.011	8.59	2.87	9.16
766	1.11	4.31	4.16	4.99	.103	6.76	3.43	11.49
767	-2.52	2.50	2.51	4.28	-.626	4.99	3.21	9.26
768	-.41	3.10	.88	1.92	.530	2.83	2.25	7.06
769	.68	2.94	3.13	2.74	.255	4.38	2.39	8.05
770	3.34	1.74	-1.86	3.02	.448	4.66	1.96	7.78
771	-.28	3.49	-.53	3.25	.187	4.16	1.71	6.28
772	1.48	2.20	-2.01	5.29	.733	5.04	3.22	9.52
773	1.46	2.81	2.66	2.34	.438	3.97	2.37	7.88
774	2.81	2.21	2.65	1.45	-.584	4.13	2.14	7.84
775	.31	2.93	-1.18	2.69	-.667	3.55	1.71	5.93
776	2.74	2.94	-.84	1.88	.728	3.97	1.83	7.52
777	-3.15	3.69	-3.66	2.81	.017	6.27	1.71	8.04
778	-9.82	4.05	-2.53	5.77	-.235	11.47	4.02	15.17

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779	.71	1.89	1.58	1.92	.042	2.77	1.36	4.86
780	1.10	3.07	1.63	1.93	-.903	3.58	1.63	6.93
781	.21	4.21	1.05	2.62	-.660	4.18	2.34	7.03
782	.08	2.75	.93	4.26	-.277	4.49	1.79	6.73
783	-9.90	5.00	-9.44	5.79	.830	13.90	7.18	23.01
784	-6.73	6.20	-12.11	7.33	.842	14.20	8.98	25.88
785	.35	2.86	-.27	1.58	-.492	2.87	1.16	5.10
786	3.06	3.32	2.78	2.21	.334	4.68	3.22	11.11
787	2.29	4.97	-4.46	3.10	.664	6.97	2.63	10.89
788	11.84	4.83	1.06	5.16	.560	13.29	3.00	18.09
789	.49	3.59	-3.04	6.72	-.526	11.37	6.31	21.49
790	-3.04	1.27	-.80	4.23	.300	4.90	1.72	7.26
791	3.37	2.77	2.22	6.00	.277	6.63	3.38	10.90
792	7.73	4.20	5.01	3.45	.201	9.12	4.55	15.26
793	-1.12	4.47	3.32	7.54	-.536	8.15	3.50	13.76
794	-3.62	3.45	-10.34	8.54	.825	11.75	7.98	20.54
795	-3.30	6.70	2.05	5.84	.811	8.35	3.92	13.79
796	2.76	2.11	1.01	2.61	-.351	4.05	1.50	6.19
797	1.97	3.33	-3.51	4.92	.695	6.26	2.91	12.30
798	-54	3.28	-2.39	1.85	.381	3.60	2.46	7.10
799	.05	1.94	-1.43	2.25	.119	2.88	1.25	5.20
800	-.67	2.03	-.04	1.51	.247	2.15	1.23	3.77
801	-.62	2.13	-1.74	1.24	.632	2.83	.83	3.99
802	3.47	2.83	1.01	2.31	.677	4.12	2.96	8.75
803	.92	.92	1.08	1.67	.184	3.07	1.06	4.22
804	-1.71	2.78	.74	1.30	-.008	4.07	1.58	4.89
805	-3.33	2.80	1.30	.92	.302	5.01	2.06	7.00
806	-1.31	3.27	2.18	1.73	.376	4.04	1.50	5.39
807	2.94	1.07	3.66	2.97	.283	7.06	2.52	8.46
808	5.60	2.98	.65	4.61	.127	3.32	2.99	11.00
809	1.03	1.95	-.96	2.94	-.103	2.25	1.37	5.03
810	.71	2.13	.45	2.29	.253	3.42	1.07	4.80
811	-.11	2.13	-1.58	2.20	-.745	2.89	1.61	5.42
812	2.60	2.71	-1.91	2.41	.622	4.04	2.50	8.00
813	-2.36	1.63	-.37	1.52	.134	2.78	1.62	4.58
814	.41	2.08	-.25	1.66	.122	2.25	1.20	4.69
815	-2.85	2.75	.19	1.63	.213	3.42	2.47	8.16
816	-.13	1.14	-2.19	3.14	.125	3.28	2.05	6.01
817	-1.22	2.47	.10	1.68	-.655	2.44	1.92	5.46
818	.87	1.88	-2.23	2.08	-.277	3.19	1.65	5.72
819	.93	1.90	3.91	2.14	.049	4.47	1.94	7.18
820	1.51	4.04	2.44	1.13	-.068	4.23	2.52	8.29
821	1.67	1.89	-4.67	4.40	.517	5.56	3.96	12.45
822	1.57	1.82	.16	4.46	-.075	3.75	3.11	10.19
823	.73	3.09	1.04	5.10	-.025	4.86	3.15	10.39
824	1.91	3.35	-2.26	1.99	.566	4.31	1.94	6.35
825	-1.11	2.57	-3.91	1.25	-.586	4.79	.83	5.91
826	7.65	4.09	-1.17	5.87	-.910	9.05	5.04	18.05
827	-6.75	5.21	7.06	6.63	-.014	11.15	6.12	21.43
828	-12.09	9.11	-2.98	5.69	.837	13.44	9.24	23.62
829	-.38	1.89	.18	2.48	-.448	2.74	1.09	4.22
830	-1.32	2.96	2.49	2.14	-.716	3.99	2.02	7.00
831	1.36	4.05	-6.12	5.19	-.737	7.01	5.64	19.04
832	3.10	2.38	4.67	3.51	-.337	6.29	2.90	12.08
833	-.24	3.49	-4.99	7.21	.808	7.55	5.18	14.98
834	2.24	1.96	-.70	4.60	.380	4.81	2.11	8.00
835	1.89	4.46	3.11	2.75	-.110	5.55	2.65	8.78
836	-.68	3.33	.68	2.66	.303	3.63	1.97	6.00
837	4.01	3.54	2.67	2.55	.124	5.68	2.91	10.50
838	.17	3.21	-5.33	2.84	.112	6.09	2.86	10.76

SANTA MONICA 6HR WIND CHANGE 3-9 KM WINTER

839	4.38	2.21	4.11	2.32	.430	6.21	2.70	10.98
840	6.77	2.28	2.53	3.52	-.306	7.96	2.14	11.11
841	7.57	3.09	6.10	4.87	-.100	10.47	3.94	16.83
842	-3.86	3.98	-3.39	4.86	-.213	6.43	4.70	12.06
843	1.80	4.69	2.77	1.66	.500	4.91	3.06	9.79
844	-5.95	7.19	-3.08	5.65	.837	7.67	8.20	24.52
845	-2.60	3.22	1.46	1.56	.223	3.87	2.39	8.19
846	-1.75	1.71	6.37	4.34	-.742	6.75	4.42	13.00
847	2.37	10.37	-10.16	5.79	-.008	14.28	5.50	21.07
848	-2.47	4.09	2.10	5.49	.046	6.87	2.04	10.81
849	-3.38	9.73	-3.45	5.27	.690	8.61	7.94	25.90
850	5.20	3.65	-1.76	3.12	-.373	6.29	3.47	12.03
851	-2.38	3.13	3.47	2.48	.360	5.24	2.14	8.67
852	1.26	1.92	2.44	2.66	.629	3.66	2.00	6.36
853	-1.77	3.90	2.54	3.32	.153	4.86	2.63	9.03
854	.61	2.65	4.40	3.85	.169	5.31	3.45	10.66
855	4.75	2.40	.06	2.83	.138	5.40	2.47	9.11
856	2.15	2.39	-1.59	1.64	.543	3.71	.84	5.00
857	-4.11	1.74	-3.13	3.37	.784	5.56	3.08	10.39
858	-4.31	6.24	.18	3.88	-.302	6.38	5.32	13.97
859	4.03	6.39	-6.08	6.88	-.681	9.38	6.89	23.19
860	-2.37	6.72	-3.95	5.43	-.940	8.27	4.42	15.92
861	3.46	2.84	1.69	6.18	-.131	6.54	3.70	12.45
862	-1.19	4.01	-3.61	5.10	.852	6.38	3.15	11.48
863	1.29	2.06	-3.61	6.33	-.112	6.03	4.37	14.70
864	-9.17	7.74	-11.46	10.42	.626	16.17	10.70	35.50
865	.40	4.28	3.53	6.39	-.036	7.09	3.90	10.98
866	4.90	3.47	2.40	3.94	-.196	6.85	2.76	10.97
867	-5.09	6.34	-3.08	5.19	-.571	8.54	4.83	15.58
868	-7.04	4.21	-8.5	2.36	.127	7.47	4.10	12.62
869	1.48	2.33	1.36	1.31	-.663	2.98	1.23	4.77
870	1.54	1.81	.32	1.48	.653	2.33	1.42	4.63
871	-2.69	1.87	3.26	2.82	-.275	4.61	2.74	8.10
872	-3.54	2.85	4.94	2.32	-.446	6.47	2.80	9.66
873	-1.94	5.43	2.64	1.97	.043	5.47	3.31	11.35
874	-.04	2.78	-.17	5.10	-.331	4.93	2.31	8.17
875	-2.94	2.21	-.82	2.43	-.441	4.05	1.57	6.82
876	-.94	5.37	-2.91	3.48	-.516	6.40	2.03	9.23
877	-2.68	1.32	-1.39	4.02	-.439	4.64	1.83	6.71
878	1.10	3.09	-2.27	4.31	.178	4.62	3.27	10.71
879	3.36	7.08	6.98	4.09	.876	9.92	4.71	14.02
880	7.71	2.68	1.54	1.32	.628	7.93	2.77	12.04

MEAN DU(M/S) = -.13
 MEAN DV(M/S) = -.06
 SD DU(M/S) = 5.96
 SD DV(M/S) = 6.89
 R(DU,DV) = .12
 MEAN W(M/S) = 7.12
 SD W(M/S) = 5.68
 SD MEAN(W/S) = 4.08
 MEAN MAXW(M/S) = 12.58
 SD MAXW(M/S) = 7.07

SANTA MONICA 6HR WIND CHANGE 9-16 KM WINTER

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	-60	1.51	4.52	4.89	.535	5.68	3.61	12.02
2	2.96	3.67	4.19	4.37	.502	6.10	4.47	12.92
3	-1.26	2.06	2.96	1.78	.420	3.61	1.61	6.20
4	4.38	3.03	.61	1.88	.385	4.78	2.98	10.00
5	1.36	4.10	-3.11	3.26	.435	5.67	1.97	8.08
6	-2.01	2.87	-1.45	2.32	.960	3.76	2.12	8.00
7	-4.36	3.62	3.02	2.11	-.636	5.57	3.77	11.19
8	-3.49	3.09	.56	2.93	.068	4.96	2.06	8.04
9	4.59	4.08	-2.58	2.41	-.666	5.67	4.18	15.33
10	-5.69	3.81	2.44	3.36	-.329	6.89	3.92	15.17
11	2.28	5.04	.09	6.69	-.050	7.67	3.00	11.28
12	-3.40	5.61	2.52	3.06	-.215	6.37	3.87	11.24
13	8.84	10.67	2.85	8.12	.619	13.01	9.22	27.23
14	-2.37	9.58	-12.51	21.70	.937	20.34	16.59	46.16
15	-1.31	3.38	-2.25	1.87	-.089	3.87	2.37	6.88
16	-9.43	7.41	-13.72	11.12	.923	16.82	13.12	42.30
17	-8.08	5.81	-1.05	14.04	-.663	14.16	8.81	31.09
18	-.69	4.25	-12.32	17.41	-.408	17.17	12.59	36.59
19	4.11	4.26	7.81	7.54	-.586	11.19	4.56	18.12
20	5.17	7.72	-3.78	4.41	-.242	8.28	6.89	21.11
21	-2.78	7.23	1.66	11.07	-.197	12.14	4.27	18.75
22	10.16	6.06	12.57	12.45	.202	17.88	11.17	34.35
23	-2.33	9.02	-2.39	5.20	.320	9.10	5.16	19.00
24	13.82	14.21	-13.32	9.94	-.826	22.30	12.39	41.55
25	-.52	6.91	.90	10.04	.398	10.25	5.44	19.60
26	4.50	9.96	-10.53	12.75	.759	16.78	9.49	29.25
27	4.09	2.91	5.44	5.89	-.560	8.15	4.49	17.86
28	-5.39	4.28	-6.19	5.46	.639	8.64	6.31	19.37
29	5.49	8.33	-2.81	6.88	.132	8.20	9.13	24.00
30	1.85	4.00	.10	3.50	-.150	4.71	2.62	7.15
31	-1.76	5.65	1.85	13.59	.737	12.81	6.04	24.91
32	2.37	4.86	-2.15	5.06	.604	6.49	3.57	12.00
33	-1.05	3.82	-4.18	5.03	.058	6.49	3.62	12.88
34	4.65	6.11	-9.39	9.55	.701	13.09	8.45	29.03
35	.43	5.12	3.13	3.23	.018	5.43	3.35	10.44
36	2.84	2.64	2.70	3.92	-.721	5.43	2.50	10.71
37	7.75	5.69	2.59	4.57	.156	9.45	5.24	18.00
38	-1.03	8.99	-1.49	5.12	.335	8.92	4.47	15.24
39	-3.50	3.89	.99	5.91	.394	6.97	3.11	10.75
40	-1.43	3.39	3.84	5.31	-.434	5.78	4.56	13.68
41	6.72	5.40	2.39	4.32	.615	8.33	5.16	16.83
42	5.28	2.25	2.35	4.04	.784	6.60	3.13	12.97
43	-1.34	4.46	2.00	1.20	.233	4.45	2.30	7.60
44	-4.06	1.04	-.34	4.08	-.748	5.31	2.11	9.79
45	-3.61	2.82	-.18	2.54	-.432	4.82	1.69	7.07
46	.02	1.39	-.11	1.60	-.408	1.86	.77	3.35
47	.53	1.58	-3.93	2.49	-.406	4.29	2.37	7.07
48	-1.66	4.01	-.95	3.41	.969	4.46	3.02	9.47
49	6.44	8.38	.41	2.92	.419	7.65	7.71	24.27
50	-4.14	2.79	-2.26	3.18	-.194	5.79	2.26	8.84
51	6.84	4.88	-3.60	4.55	-.195	9.40	3.42	13.94
52	-5.68	6.58	-3.25	3.09	.820	7.88	5.57	17.52
53	-6.57	7.09	7.04	4.33	.052	10.82	6.41	20.78
54	1.71	6.45	1.77	10.44	-.220	10.36	5.90	18.48
55	-2.21	6.38	4.25	5.22	-.389	8.47	3.49	15.56
56	5.41	7.15	-.65	4.62	-.847	7.58	6.39	17.30
57	3.61	3.88	8.17	5.22	-.190	10.06	4.23	17.06
58	1.19	5.17	3.09	5.95	.501	7.10	4.12	15.34

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SANTA MONICA 6HR WIND CHANGE 9-16 KM WINTER

59	- .96	6.71	7.77	3.42	- .482	10.23	2.68	14.14
60	2.99	3.96	9.29	7.80	.726	10.37	7.91	19.95
61	- .51	3.52	.75	5.18	- .500	5.22	3.00	11.29
62	1.43	3.89	.89	4.87	- .463	5.46	2.84	10.09
63	- .08	4.67	-3.76	4.47	- .563	5.84	4.35	13.49
64	- .04	1.62	-1.98	1.82	- .473	2.66	1.52	4.24
65	1.38	1.97	7.10	5.17	- .365	8.24	3.58	13.78
66	3.79	6.07	7.39	5.72	- .514	10.08	5.68	16.43
67	-1.10	5.10	-2.86	8.45	- .766	7.65	6.42	19.04
68	-2.25	2.96	5.23	5.12	.463	7.41	3.03	12.04
69	1.16	2.56	13.58	8.16	- .394	14.05	7.73	22.92
70	-1.43	4.13	6.43	2.52	.759	7.73	2.19	11.41
71	-14.27	10.31	3.22	10.57	- .441	17.67	10.27	36.67
72	-2.92	5.95	-7.19	8.82	- .577	10.61	7.30	23.07
73	4.82	2.30	1.05	4.56	.338	6.45	2.53	9.81
74	5.10	2.18	1.13	5.56	.814	7.06	3.14	12.21
75	2.32	4.28	1.41	4.29	.228	5.66	2.93	9.58
76	2.75	3.38	.07	5.46	.565	5.04	4.57	14.44
77	-2.51	3.43	3.37	4.42	.296	6.17	2.83	10.19
78	1.63	3.32	2.16	3.82	.293	4.51	3.28	9.04
79	1.60	3.72	1.94	2.25	.831	4.36	2.12	7.22
80	- .72	3.25	3.43	2.76	.032	4.90	2.20	8.32
81	- .24	4.24	3.22	3.31	.103	5.34	2.87	8.16
82	-2.16	4.91	8.16	8.57	- .748	10.26	7.66	23.99
83	-2.31	3.63	8.62	2.76	- .094	9.46	3.11	14.17
84	2.05	2.05	3.74	5.23	.165	5.59	4.07	12.78
85	.22	3.72	4.41	4.98	- .149	6.41	3.73	11.62
86	4.77	4.16	2.91	5.29	.765	7.08	4.86	14.94
87	1.13	2.01	2.10	2.60	- .165	3.25	2.28	7.84
88	3.06	2.50	- .11	1.53	- .364	3.71	1.88	6.85
89	5.51	8.74	-8.38	9.86	- .377	12.80	10.08	30.85
90	-9.92	9.27	-2.19	5.28	- .061	12.24	7.79	23.00
91	-2.36	5.07	6.27	5.00	- .289	8.02	5.33	14.16
92	- .33	6.62	-16.29	11.01	.349	17.77	10.36	32.33
93	3.47	2.72	6.24	4.25	.119	7.63	4.15	13.86
94	8.98	6.07	5.35	9.82	- .382	13.42	7.24	26.69
95	1.99	4.48	4.44	5.14	.845	7.10	3.99	12.61
96	3.07	4.11	3.21	3.21	.233	5.95	3.04	10.61
97	- .08	4.07	-8.15	8.01	.327	8.79	8.27	22.77
98	- .07	4.29	5.98	4.92	- .069	7.03	5.19	14.55
99	-5.31	4.24	1.33	1.27	- .822	5.51	4.38	12.00
100	-3.93	2.48	2.70	2.21	.307	5.53	1.48	8.45
101	1.65	6.03	3.77	5.63	.345	7.45	4.90	17.22
102	-6.85	10.59	-2.69	6.84	.842	9.50	10.86	29.73
103	.69	5.48	.90	6.34	.536	7.12	3.72	12.00
104	10.61	6.31	7.41	5.67	.445	13.67	7.06	22.60
105	-1.44	4.22	3.36	1.89	.832	5.38	1.90	8.69
106	1.11	2.28	3.56	2.11	.849	4.46	1.68	6.76
107	-2.59	5.70	-4.17	2.75	.062	6.62	4.19	15.38
108	-7.67	7.95	-23.54	26.71	.981	25.19	27.43	73.22
109	5.91	4.37	-5.07	5.48	- .162	8.78	5.49	17.19
110	7.19	4.48	4.85	8.34	.808	11.19	5.69	19.75
111	-4.95	2.65	-11.62	7.76	.653	12.92	7.67	23.84
112	2.27	3.36	-6.90	3.98	- .939	7.70	4.44	14.00
113	-1.08	3.55	1.50	3.49	.564	4.77	1.63	6.87
114	5.11	4.39	-4.86	4.38	- .465	7.86	4.97	15.58
115	3.94	4.53	1.91	5.19	.899	6.60	4.42	16.18
116	- .28	2.01	4.48	3.80	.739	5.65	2.24	8.70
117	1.38	9.52	4.46	8.56	- .494	11.50	6.13	22.48
118	1.01	7.60	5.63	4.52	.379	9.29	4.13	15.82

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SANTA MONICA 6HR WIND CHANGE 9-16 KM WINTER

119	11.43	5.81	-7.47	12.28	-7.02	16.00	10.26	32.08
120	-1.38	10.66	6.32	9.68	-836	12.88	7.97	26.24
121	-3.04	3.92	1.49	8.09	-134	8.86	2.04	10.70
122	3.70	5.45	2.37	5.91	-464	7.54	4.66	14.08
123	4.28	7.86	-8.20	8.75	-601	11.66	8.99	23.49
124	1.78	6.07	2.91	4.86	-176	7.68	2.50	11.22
125	-3.73	3.64	-49	5.03	-711	6.27	3.13	10.99
126	-3.94	6.18	-51	2.69	-239	6.11	4.58	15.84
127	-3.91	3.49	-2.46	2.99	-116	5.35	3.58	11.58
128	-3.56	4.24	-5.80	4.35	-733	7.21	5.50	17.87
129	-1.67	3.11	8.81	4.18	-740	9.28	4.24	15.05
130	1.93	3.99	2.78	2.78	-253	4.91	3.04	11.12
131	-2.82	6.47	-4.92	5.08	-148	8.98	3.50	12.46
132	2.07	5.57	-1.32	4.82	-840	6.51	3.56	13.93
133	1.97	1.71	3.82	1.55	-423	4.52	1.77	7.02
134	3.28	2.99	1.88	3.19	-114	5.33	1.74	8.07
135	-1.84	4.79	-58	3.15	-049	5.25	1.61	7.04
136	-3.53	4.27	-1.61	3.02	-425	5.63	2.88	11.04
137	-4.45	2.74	2.62	5.71	-003	5.72	3.28	11.34
138	4.32	3.88	3.93	2.06	-540	6.08	4.00	14.04
139	-1.49	3.03	-02	3.51	-209	4.28	1.76	6.20
140	-2.19	4.83	-1.73	2.67	-405	5.53	2.12	8.05
141	-1.93	2.65	1.64	5.59	-447	4.87	3.90	12.01
142	1.67	3.92	-5.51	1.62	-354	6.69	2.18	10.00
143	1.40	4.86	6.08	6.79	-454	8.68	5.30	17.79
144	-1.18	3.86	7.33	4.86	-476	4.88	4.23	12.96
145	5.80	5.17	-3.24	7.09	-381	9.39	5.18	18.47
146	3.87	6.90	-1.17	3.53	-732	6.27	5.82	19.14
147	-1.53	3.34	-3.44	3.97	-425	5.34	2.85	11.02
148	-5.68	3.93	-9.21	3.47	-028	11.32	3.89	16.37
149	-6.27	4.22	-4.24	5.86	-852	8.39	6.08	17.79
150	4.85	5.80	-54	5.00	-675	7.75	4.16	13.21
151	-3.31	3.12	-1.80	4.07	-145	5.58	2.64	8.31
152	-0.05	2.13	1.59	3.78	-735	4.19	1.29	6.35
153	1.90	4.77	-2.86	6.61	-211	7.41	4.14	15.91
154	3.68	3.46	-04	3.16	-190	5.04	2.90	9.75
155	-1.42	2.31	-1.20	3.25	-162	3.23	2.42	7.31
156	-1.63	4.22	-1.71	2.91	-822	4.56	2.99	9.75
157	8.84	5.04	-4.30	5.12	-191	10.88	5.16	19.40
158	4.63	7.66	-3.89	5.11	-102	9.61	4.58	20.08
159	7.10	4.51	1.08	1.05	-255	7.33	4.35	14.35
160	6.64	7.31	-1.64	2.92	-497	7.79	6.80	18.09
161	.88	3.15	-10.57	6.82	-322	11.45	5.93	19.40
162	3.74	2.73	2.34	5.19	-621	5.68	4.45	14.01
163	-1.63	2.60	5.09	2.42	-574	5.65	2.50	10.76
164	-3.92	10.18	6.69	2.85	-353	12.12	3.55	17.55
165	-6.98	3.70	3.27	6.31	-179	9.74	3.61	16.02
166	-9.1	4.18	3.50	4.40	-590	6.51	1.84	9.35
167	7.81	5.78	-5.80	7.19	-071	11.08	7.28	22.11
168	8.82	4.66	4.28	6.48	-395	11.36	5.10	18.38
169	-2.27	4.85	-85	2.63	-490	4.97	2.98	11.37
170	-2.97	3.93	-7.53	3.20	-646	8.49	4.27	15.61
171	1.26	2.58	-1.91	3.01	-402	3.99	1.86	6.19
172	-1.29	4.21	-4.23	4.92	-538	6.10	3.55	12.02
173	-14.25	14.47	-4.56	3.69	-751	16.05	13.58	36.41
174	2.14	4.17	-15.42	12.32	-644	16.03	12.35	34.08
175	-1.36	4.01	-37	3.64	-160	4.77	2.36	8.32
176	-1.92	3.39	1.31	3.40	-232	4.45	2.56	7.82
177	-4.27	2.89	-97	3.89	-179	5.77	2.72	9.36
178	.04	4.13	.34	5.39	-583	5.51	3.41	11.02

SANTA MONICA 6HR WIND CHANGE 9-16 KM WINTER

179	2.70	3.76	- .43	3.76	4.75	3.33	9.91
180	4.64	5.51	-3.29	2.66	7.09	4.11	14.35
181	-8.48	9.32	- .85	4.29	10.30	8.19	22.24
182	1.83	5.61	-7.86	6.00	9.49	6.24	18.13
183	3.53	2.78	4.22	3.70	6.14	3.60	11.90
184	4.23	2.71	-1.00	3.69	5.49	2.85	9.20
185	-15.46	14.15	-6.88	4.79	17.10	14.71	39.33
186	-3.34	1.56	-3.93	2.66	5.26	2.87	10.28
187	-1.53	6.63	4.55	5.21	8.68	3.37	13.75
188	-2.28	4.84	.84	2.31	4.48	3.55	10.08
189	1.26	2.29	-2.77	3.28	4.47	1.96	6.37
190	2.27	2.78	-1.14	2.07	3.92	1.35	5.85
191	1.16	4.97	-5.15	5.74	7.70	4.66	16.65
192	-4.04	3.03	5.40	3.60	7.88	1.80	10.23
193	2.07	4.24	7.13	4.73	8.53	4.51	15.42
194	3.71	5.39	4.18	2.81	6.63	4.74	16.31
195	-2.68	5.87	4.88	8.36	9.75	5.59	17.38
196	.96	3.34	4.29	5.89	7.19	2.99	12.18
197	3.31	2.19	3.39	4.17	5.66	3.34	11.68
198	3.08	5.27	- .73	3.47	6.04	3.09	12.60
199	1.10	7.69	- .56	3.49	7.64	2.53	11.50
200	-9.38	10.78	-5.49	6.71	12.44	10.92	27.92
201	1.17	6.37	.24	4.78	6.93	3.18	10.61
202	-1.77	5.38	-.63	5.54	6.32	4.25	14.39
203	-1.33	3.98	-2.12	2.01	4.05	2.89	9.78
204	4.24	2.82	-8.90	6.05	10.59	5.24	20.41
205	2.87	7.99	3.02	3.27	8.39	3.73	14.58
206	-3.46	5.72	-2.11	5.18	7.14	4.47	14.73
207	-7.82	5.33	-5.32	12.35	13.44	8.76	31.16
208	-1.57	6.18	1.72	7.38	8.09	4.91	17.53
209	-7.03	3.89	-.37	5.34	8.68	3.75	12.44
210	-5.18	1.95	-1.80	4.74	6.88	2.57	11.24
211	3.36	2.37	6.86	4.23	8.06	3.98	14.04
212	.77	4.00	3.28	3.62	5.63	2.40	8.09
213	4.14	5.75	-1.21	5.09	7.58	3.83	13.02
214	4.43	6.15	-1.77	3.42	7.40	3.60	12.17
215	-1.69	3.69	1.04	6.28	6.55	2.90	12.09
216	4.90	2.15	7.81	2.38	9.48	2.17	12.22
217	3.01	2.93	-3.97	5.72	6.76	4.16	13.39
218	3.72	4.24	5.94	3.99	8.38	3.13	12.90
219	2.77	2.83	2.23	2.89	4.45	2.86	8.05
220	.28	2.24	.05	3.82	3.57	2.25	6.54
221	-1.93	4.99	4.04	5.27	7.59	3.13	12.62
222	-5.41	6.06	-5.65	4.74	9.41	5.29	17.91
223	9.55	4.92	7.99	5.20	13.33	5.05	19.31
224	4.80	12.83	9.54	5.11	14.94	8.11	29.00
225	3.46	6.58	4.03	4.00	7.80	4.69	14.15
226	5.44	8.57	2.86	1.72	8.87	5.45	16.51
227	-4.43	3.98	.48	5.04	6.28	4.36	12.41
228	4.16	1.87	2.27	2.77	5.17	2.52	8.90
229	2.01	2.66	.81	1.75	3.39	1.55	6.23
230	.79	1.78	-.32	2.89	2.87	1.84	5.11
231	4.01	3.47	2.29	4.34	6.29	3.16	10.75
232	3.11	3.52	2.42	4.57	5.57	3.96	13.52
233	3.68	1.76	6.78	4.35	8.29	3.40	11.54
234	2.77	2.60	2.91	1.64	4.73	1.56	7.30
235	2.03	6.01	-2.02	3.27	4.74	5.53	14.04
236	2.66	3.07	3.84	4.04	5.20	4.45	10.96
237	2.06	5.19	6.14	1.92	8.12	1.78	12.00
238	-1.38	4.89	-4.15	2.25	6.38	2.06	10.00

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239	-10.61	5.76	- .95	6.79	.420	12.61	5.23	18.38
240	6.66	3.97	2.94	3.28	.432	7.71	14.66	7.71
241	-2.53	4.06	1.52	3.28	.215	4.75	3.37	10.00
242	-2.01	3.90	1.13	3.20	.635	4.94	1.89	7.72
243	2.81	4.36	.80	2.38	.057	5.10	2.16	8.28
244	4.45	6.59	2.80	5.30	.207	7.87	5.69	18.14
245	-5.75	8.45	-8.34	7.51	.782	12.85	7.51	23.59
246	- .71	10.26	-3.14	5.95	.772	10.28	5.64	18.32
247	-7.76	7.95	4.34	6.95	.482	9.35	5.81	19.13
248	1.24	9.32	-7.10	9.25	-.871	11.17	9.45	31.06
249	-3.11	5.31	-3.16	4.52	.888	6.26	5.13	13.00
250	-1.14	2.35	-2.52	2.22	.725	3.58	2.14	7.67
251	-1.59	4.86	2.80	5.20	-.793	6.01	6.01	19.26
252	1.91	4.04	-3.09	4.22	.460	5.68	3.51	13.70
253	-3.12	3.24	1.47	4.54	-.669	5.76	2.59	9.66
254	-2.35	4.57	-2.25	5.24	-.314	6.70	3.02	10.04
255	.61	1.96	.77	2.21	-.377	2.67	1.28	5.18
256	.53	2.67	-2.67	3.35	-.430	4.08	2.80	10.21
257	3.41	3.30	-1.42	2.13	-.446	4.14	3.37	8.59
258	.43	5.12	5.87	4.68	-.920	8.11	3.53	12.88
259	.11	3.20	-1.65	6.49	.231	5.45	4.65	15.44
260	1.03	4.39	-1.74	4.07	.467	5.27	2.95	9.39
261	5.36	6.21	3.27	8.70	.862	8.59	8.65	27.28
262	5.79	2.36	3.34	10.14	.421	9.00	8.18	28.34
263	.88	2.98	5.34	4.45	.060	6.32	4.07	12.64
264	2.76	6.70	.31	3.34	.046	6.73	3.61	12.05
265	-7.28	7.04	.49	5.80	.740	9.54	6.32	18.77
266	.83	5.48	7.32	4.12	.464	8.89	4.31	14.99
267	-4.28	5.48	2.78	7.20	-.609	8.18	5.92	17.97
268	-4.12	5.59	-3.08	3.94	.048	7.53	3.48	12.38
269	-1.62	4.59	6.84	5.42	-.128	8.27	5.36	17.54
270	1.52	6.42	3.08	4.67	-.437	6.61	5.16	13.45
271	-2.87	5.47	-4.23	2.41	.524	6.48	4.19	13.24
272	2.11	2.28	-14.45	7.11	.053	14.78	7.05	26.20
273	.09	4.75	3.95	4.23	.218	6.72	2.57	10.43
274	-1.06	3.71	3.20	3.44	-.319	5.21	2.76	8.47
275	-1.93	3.85	.53	5.49	-.116	6.00	2.89	11.14
276	.92	3.42	4.36	5.91	.079	6.77	4.10	14.97
277	-4.12	3.47	-3.16	3.26	.823	6.14	3.23	9.53
278	-3.60	2.41	-5.60	2.70	-.633	7.33	1.54	9.61
279	-.54	6.78	3.93	5.98	-.646	8.24	4.71	16.12
280	-2.03	4.11	.62	8.47	.218	8.56	3.18	12.09
281	-2.22	6.37	2.40	4.79	-.529	7.79	2.52	10.09
282	2.05	5.94	2.86	3.10	.202	6.49	3.31	14.02
283	5.23	6.13	-.98	8.30	-.303	9.27	6.38	20.58
284	7.64	9.22	-4.20	4.70	-.729	9.80	9.18	29.62
285	-4.52	1.37	4.07	5.86	-.070	7.46	3.85	15.37
286	-5.14	3.59	1.73	9.68	-.387	10.36	4.20	15.33
287	-.31	4.55	3.76	6.71	-.176	5.44	5.44	17.81
288	-2.04	4.56	7.25	4.91	-.074	8.77	4.67	17.02
289	.47	7.25	3.91	3.31	-.254	6.84	5.26	15.94
290	2.66	3.89	5.26	4.01	.487	6.56	4.66	14.49
291	.00	3.71	.42	1.21	.115	3.45	1.35	6.07
292	4.70	3.05	2.41	1.50	.405	5.56	2.85	9.04
293	-2.28	2.09	-9.96	8.30	.183	10.89	7.53	22.20
294	6.70	5.93	-10.42	15.97	-.496	16.85	11.88	39.60
295	-1.83	6.28	.64	4.81	-.079	6.64	4.05	14.32
296	3.97	4.34	3.01	5.41	.504	6.98	4.55	16.40
297	5.58	6.10	-7.23	7.62	-.797	9.88	8.89	22.74
298	2.66	3.06	-2.21	5.64	.569	6.46	2.68	11.32

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299	5.09	5.09	2.76	2.53	.735	6.95	3.94	10.47
300	1.47	4.44	2.58	3.57	.647	4.91	3.88	11.99
301	-13.54	5.36	-9.62	4.27	.491	16.90	5.99	24.00
302	-3.99	3.41	-3.58	6.58	.270	7.83	4.21	16.82
303	-7.81	2.93	-11.92	8.38	.627	14.67	8.06	31.34
304	4.35	2.74	-7.68	7.32	.038	10.17	5.65	21.04
305	-3.24	1.70	-1.38	4.75	.167	5.63	1.84	8.52
306	2.56	2.41	.11	5.12	.229	5.21	2.90	9.38
307	-1.20	3.45	.34	2.60	-.271	3.89	1.76	7.27
308	1.01	4.07	.77	3.22	.330	4.74	1.76	7.03
309	2.99	2.88	5.90	7.13	-.181	8.69	4.78	16.92
310	-5.41	4.19	3.68	4.66	-.182	7.75	4.41	17.13
311	-5.01	4.12	.06	5.33	.063	7.36	3.50	12.42
312	-.86	4.64	5.67	5.66	-.482	7.40	5.35	13.78
313	2.24	7.57	3.42	6.90	.343	9.42	4.74	16.02
314	2.64	9.37	3.42	13.86	.670	17.83	9.26	29.65
315	2.34	2.49	.31	2.97	-.453	3.77	2.26	6.09
316	-2.21	3.48	-1.04	3.20	.055	4.54	2.35	7.47
317	4.32	5.53	3.29	8.50	-.314	9.25	6.22	21.37
318	10.34	4.40	1.92	3.65	-.178	11.15	4.13	15.87
319	-1.48	3.16	4.45	5.29	.344	7.06	2.50	11.00
320	3.85	4.37	6.73	6.93	.858	8.73	6.99	20.16
321	-5.04	5.33	6.92	2.07	-.164	9.35	4.05	17.45
322	8.30	5.68	5.65	3.73	-.028	10.96	4.92	18.71
323	-8.86	6.26	-1.52	4.37	-.746	10.29	5.44	17.66
324	-6.47	6.47	-10.01	9.82	.257	13.86	9.01	31.15
325	-4.01	3.20	1.27	7.02	-.248	7.71	3.44	12.18
326	.40	4.73	1.63	8.51	.049	8.32	4.37	16.16
327	2.72	6.70	-5.11	5.78	-.597	8.95	5.01	16.03
328	5.77	10.36	4.25	4.83	.512	11.58	6.00	19.68
329	-96	5.20	6.70	11.01	-.807	11.34	7.32	21.00
330	3.85	2.86	-8.18	9.14	.136	11.01	6.82	21.90
331	3.73	6.94	2.92	9.59	-.698	11.22	4.68	17.18
332	3.43	5.59	-2.22	3.79	-.944	6.03	4.81	14.36
333	-4.20	4.13	-2.79	1.91	-.279	6.25	2.25	10.32
334	-8.56	5.21	-13.00	9.03	.567	16.18	9.31	28.11
335	-1.05	2.46	7.89	5.70	-.007	8.92	4.47	16.32
336	1.14	3.61	2.80	5.28	.509	6.52	1.66	9.91
337	-3.25	3.70	4.10	4.14	-.162	6.62	3.46	10.89
338	5.17	4.56	.08	8.84	-.402	9.90	4.18	15.90
339	2.84	3.89	5.84	4.90	-.187	8.03	3.70	14.69
340	4.59	5.67	.06	3.37	-.008	6.44	4.49	15.85
341	-3.62	4.29	-15.30	10.94	.454	16.84	9.83	30.93
342	-3.70	3.98	4.09	6.70	-.766	8.78	2.73	14.48
343	-1.74	3.77	-14.14	11.63	.281	14.86	11.37	35.80
344	8.53	6.21	-5.27	7.03	-.554	10.98	8.07	25.52
345	-4.29	6.13	-2.73	5.72	.748	8.08	5.04	14.62
346	-9.22	5.64	-3.21	2.29	-.125	10.20	5.19	18.05
347	-8.72	6.43	.04	2.46	-.551	9.05	6.36	19.71
348	2.94	2.45	1.74	1.93	.023	4.12	1.90	7.49
349	-2.25	2.51	2.48	5.32	-.261	6.00	2.52	11.08
350	4.23	1.81	5.06	4.56	.795	7.08	4.06	12.79
351	-1.73	2.38	-12.79	9.35	-.479	13.80	8.10	25.24
352	-1.43	4.01	-.92	8.43	.005	7.93	4.31	14.00
353	-2.40	2.14	.12	1.28	-.001	2.82	1.92	5.47
354	.74	1.48	-.15	2.16	.362	2.40	.96	4.08
355	4.20	1.89	-3.36	3.78	-.706	6.02	3.07	10.96
356	-2.47	2.59	-.97	4.72	.664	5.15	2.60	9.12
357	3.52	6.32	8.91	9.50	.178	12.32	7.84	24.24
358	5.07	5.43	2.90	6.75	.278	9.10	4.39	14.06

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359	-1.29	4.27	6.00	2.58	7.16	7.48	2.01	10.49
360	.01	4.93	6.16	8.80	.819	9.46	6.56	23.68
361	9.73	4.60	.12	6.93	-.052	12.02	3.50	16.83
362	-5.56	12.59	2.60	7.21	.763	13.48	6.78	25.35
363	3.49	2.77	-1.07	3.71	-.323	5.25	2.26	8.51
364	1.01	5.39	-.52	2.12	-.204	4.97	2.61	8.02
365	.46	7.10	-6.02	2.85	-.896	8.29	4.65	19.52
366	-2.79	9.72	-4.92	5.53	-.078	9.73	7.30	24.99
367	2.92	4.29	6.23	4.91	.284	8.58	3.54	13.58
368	-3.89	9.09	6.60	5.60	.420	12.01	4.03	17.61
369	-4.05	1.14	-3.84	1.72	.628	5.66	1.78	7.61
370	-4.27	5.26	-2.96	2.19	.813	6.03	4.67	15.18
371	-.43	6.52	-.01	5.24	.544	6.88	4.01	13.05
372	1.21	2.75	2.24	3.95	-.725	4.58	2.55	8.28
373	-6.56	4.76	-1.13	1.42	.439	7.26	3.89	13.10
374	1.73	4.93	-6.27	1.53	-.893	7.83	2.23	11.61
375	6.39	3.55	-3.06	1.78	-.243	7.54	2.88	11.47
376	-1.32	4.70	-4.89	4.84	.049	7.26	3.81	13.74
377	-2.68	2.96	2.75	1.86	-.174	4.69	1.97	7.33
378	-.22	2.47	2.73	2.38	-.552	3.82	1.91	6.86
379	-.72	3.98	-.42	5.73	-.704	5.91	3.10	10.83
380	2.24	4.18	1.70	2.16	-.052	4.87	1.99	7.48
381	1.35	3.12	-11.33	8.82	-.350	11.81	8.78	25.96
382	3.71	6.24	-.64	5.21	-.277	7.66	3.91	14.12
383	-3.23	6.25	4.66	6.16	-.686	8.60	5.41	18.34
384	3.33	7.06	2.56	8.07	-.870	9.82	4.99	20.00
385	1.73	2.45	.11	3.75	.232	4.15	1.95	6.49
386	1.89	5.51	-5.96	6.69	-.729	8.65	5.85	17.71
387	-6.26	3.70	-4.62	1.97	.062	8.29	2.86	12.78
388	-1.73	2.54	-.65	4.89	.208	5.27	1.57	7.08
389	-1.14	2.54	-8.32	8.50	.196	9.52	7.47	21.25
390	5.34	1.84	8.21	8.34	-.290	11.70	5.11	18.02
391	.63	4.71	-3.20	7.72	.482	8.66	2.87	12.96
392	-6.36	3.33	-1.81	3.71	-.532	7.50	3.24	11.05
393	4.19	8.41	-1.67	2.53	.582	7.88	5.44	16.64
394	9.20	7.25	-.27	5.67	.453	11.03	6.51	18.82
395	7.67	4.83	4.21	3.60	.364	9.27	5.05	15.29
396	-7.60	11.01	-10.96	9.39	.730	16.39	10.28	28.22
397	-.85	2.58	-.50	2.55	.356	3.35	1.21	5.07
398	1.40	6.29	-1.27	3.59	.353	6.42	3.08	11.20
399	2.35	4.52	4.80	5.93	.691	6.67	6.12	19.60
400	3.24	2.59	2.24	3.19	.538	4.78	2.93	8.42
401	-7.08	8.07	-2.65	8.44	-.341	12.23	5.54	20.75
402	-9.43	9.26	-.68	7.36	-.196	12.78	7.44	24.64
403	-5.48	5.88	-1.16	3.21	-.212	7.08	4.84	16.01
404	1.28	4.05	-.08	4.14	.491	4.75	3.10	9.26
405	5.77	4.46	-2.56	3.34	-.272	7.48	3.54	14.07
406	-1.60	4.81	-8.74	8.21	-.346	11.11	6.31	21.86
407	-5.84	6.16	-7.26	5.84	.679	10.19	7.26	19.49
408	-6.08	2.72	-4.43	3.46	.496	7.81	3.79	13.19
409	-11.38	7.97	-4.64	9.12	.819	13.60	10.39	34.34
410	-4.25	4.73	-3.29	4.43	.660	6.82	4.66	14.83
411	1.96	4.08	-1.89	1.60	.532	4.29	2.59	9.47
412	6.12	3.83	-1.65	1.64	-.042	6.67	3.53	12.08
413	-3.90	2.50	.45	1.82	.135	4.40	2.24	8.03
414	-.65	3.77	-.49	2.67	-.203	3.96	2.05	6.77
415	6.44	4.35	-.65	5.72	.324	8.57	3.95	13.55
416	-.17	2.14	3.09	1.24	.332	3.61	1.48	6.09
417	-3.18	4.48	2.71	5.83	.446	7.15	3.95	13.12
418	1.54	3.94	.59	3.92	-.327	5.33	1.21	7.02

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419	3.13	4.48	-3.78	4.89	7.04	3.86	11.46
420	-3.83	4.53	-4.63	4.26	7.89	2.95	13.58
421	-5.73	9.54	-4.46	5.74	9.37	9.15	25.93
422	-10.60	8.97	-8.95	7.38	13.99	11.45	32.21
423	4.33	2.85	1.39	2.45	5.12	2.79	9.26
424	1.90	5.15	.41	4.90	6.56	2.39	9.53
425	4.90	6.19	1.02	1.01	6.26	4.83	15.00
426	-8.26	5.53	-6.03	8.80	12.47	7.06	24.55
427	.83	3.76	3.88	6.28	7.02	3.91	13.69
428	-1.17	2.88	1.95	1.88	3.73	1.36	5.58
429	5.29	4.06	3.35	4.40	7.69	3.60	13.13
430	3.46	3.32	4.75	2.20	6.54	2.56	9.26
431	2.80	2.12	- .75	1.95	3.44	2.09	7.89
432	2.77	3.00	- .22	4.70	4.85	3.61	12.15
433	6.97	8.39	1.82	2.02	8.30	7.41	23.00
434	.89	6.87	7.64	2.83	9.55	4.32	16.63
435	-2.72	5.14	-8.03	2.88	9.69	3.07	13.84
436	-1.84	8.36	-3.26	6.84	10.05	4.17	16.06
437	-.62	2.44	.75	6.11	5.46	3.22	10.22
438	.45	3.81	3.41	4.90	6.39	2.33	9.22
439	2.64	2.09	2.83	3.56	4.58	3.19	9.71
440	5.79	4.42	-3.65	4.58	7.69	5.16	15.11
441	5.31	6.02	-1.92	3.72	7.47	4.76	18.00
442	1.51	7.60	-2.37	4.33	7.69	4.24	15.00
443	-2.70	3.28	2.96	1.99	5.09	1.85	9.08
444	2.90	3.02	-1.24	1.22	3.65	2.59	8.44
445	1.82	3.97	2.67	5.40	5.20	5.09	14.63
446	-3.72	5.51	-3.38	4.40	6.58	5.39	15.36
447	.20	2.84	-4.39	6.13	6.93	4.10	12.52
448	.48	2.89	-4.25	3.21	5.27	2.75	8.93
449	4.06	2.89	4.08	8.77	7.85	7.26	20.38
450	-1.79	3.40	-2.13	3.27	4.65	2.54	8.01
451	-.47	2.89	1.71	4.68	5.12	1.97	7.96
452	.41	3.38	.57	2.24	7.62	2.21	7.62
453	-3.29	2.89	8.03	3.83	9.47	2.59	13.64
454	.78	4.56	.31	6.59	7.21	2.33	10.57
455	3.30	2.48	3.12	3.68	5.85	2.05	8.86
456	1.26	2.98	5.23	3.92	6.75	2.28	9.44
457	-2.47	3.49	6.55	6.01	8.86	3.82	15.58
458	.33	1.77	3.82	4.69	5.49	2.74	8.85
459	-3.46	3.12	6.97	5.29	9.23	3.07	12.73
460	.65	7.12	-4.82	9.32	11.27	4.38	14.22
461	-.23	2.38	6.83	5.78	7.23	5.72	16.17
462	-3.78	3.36	-2.83	2.53	5.87	1.95	9.07
463	3.78	3.42	3.58	5.29	6.80	2.14	9.59
464	4.37	5.96	3.26	4.94	8.58	3.13	14.28
465	-1.82	5.01	-1.36	4.68	6.03	3.37	10.15
466	.97	3.45	1.42	5.14	3.64	3.64	11.80
467	3.39	3.90	.43	5.53	6.51	3.29	10.90
468	-3.50	2.71	1.51	4.07	5.34	2.82	9.41
469	-2.37	5.88	2.27	2.95	5.92	3.95	12.06
470	-2.85	4.20	2.73	2.73	4.96	3.43	11.35
471	-.91	4.22	.52	4.64	4.07	4.65	13.40
472	3.52	3.79	1.18	2.24	5.01	2.54	9.88
473	-.04	4.04	-4.68	4.75	6.48	4.00	12.94
474	9.70	7.85	-1.45	5.48	11.09	7.81	27.38
475	-5.98	2.66	3.70	4.21	8.02	2.79	13.45
476	-4.19	3.54	-.95	2.13	5.30	2.47	8.42
477	5.76	5.09	.90	4.20	7.73	3.76	13.79
478	3.07	4.00	8.41	11.66	12.08	8.76	24.41

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479	3.65	3.54	3.27	2.28	5.80	2.84	8.79
480	.12	2.37	6.20	-.014	7.66	5.75	18.29
481	-4.83	5.06	2.88	-.098	6.06	4.96	15.16
482	-1.82	4.21	6.13	-.330	7.86	4.96	16.99
483	-2.16	1.55	2.18	-.239	3.09	1.82	6.86
484	-2.62	1.74	1.19	.633	3.00	1.49	5.05
485	.07	3.06	4.43	.186	4.23	3.02	8.02
486	2.69	4.19	3.27	-.338	4.85	3.69	11.90
487	2.10	7.96	3.23	-.543	8.06	4.32	16.28
488	-4.00	5.17	2.71	.125	5.85	4.02	14.56
489	10.44	15.82	10.02	-.736	15.88	15.11	37.61
490	-.26	7.47	5.00	-.273	7.70	3.70	14.16
491	-2.86	6.14	4.05	.843	7.43	3.40	12.17
492	.76	6.86	2.95	-.334	6.84	3.82	12.36
493	3.79	10.84	6.61	-.403	11.82	7.39	20.62
494	.42	4.94	6.11	.650	7.34	5.35	17.24
495	-8.32	8.54	6.84	-.418	13.42	7.89	25.27
496	-4.20	5.14	1.85	-.419	9.34	1.27	11.34
497	-.94	3.46	3.00	.159	4.99	2.54	8.14
498	-.51	3.12	5.75	.383	7.39	4.90	16.15
499	3.19	4.17	2.51	-.727	4.92	2.87	11.53
500	-.37	5.86	4.30	-.677	7.18	1.50	9.13
501	-2.76	6.19	2.53	-.365	6.56	3.51	11.32
502	1.41	3.81	5.00	.060	5.63	2.37	8.88
503	-1.40	2.77	1.15	.292	2.97	1.69	5.92
504	-2.34	1.90	2.75	-.409	3.78	1.75	5.68
505	1.71	3.32	3.31	.189	4.90	2.90	8.68
506	4.40	3.24	2.29	-.177	4.95	3.14	11.02
507	-6.19	3.59	4.88	.499	8.31	4.28	14.32
508	-5.14	5.65	4.44	-.657	7.25	4.83	15.00
509	-1.63	2.79	4.14	-.784	5.79	2.36	8.60
510	-.69	7.55	6.14	.839	10.83	5.99	21.56
511	-4.40	4.78	4.11	-.473	6.96	2.59	12.18
512	-.50	3.69	3.44	-.302	4.36	2.28	8.90
513	-2.79	5.32	2.26	-.612	7.10	2.86	11.04
514	7.63	2.82	4.02	.216	9.50	2.99	13.56
515	-4.38	2.36	3.46	-.001	6.20	3.13	10.80
516	-4.37	3.41	4.06	.350	6.05	3.57	12.43
517	-.98	4.72	9.19	-.554	10.12	7.15	21.28
518	-1.12	3.58	3.87	.596	4.35	3.12	10.04
519	-5.31	4.77	3.06	.543	7.38	3.55	12.47
520	2.66	2.60	2.56	.176	5.29	1.83	8.56
521	4.72	5.69	4.00	-.721	6.37	5.77	20.02
522	6.36	4.85	2.54	-.163	7.19	4.14	12.46
523	-8.88	7.19	8.54	.717	13.52	7.97	25.96
524	-5.36	2.95	5.46	-.244	8.37	3.57	14.80
525	-6.54	6.26	5.90	.771	8.96	7.37	24.15
526	-2.29	5.22	5.53	.450	15.90	5.56	23.17
527	-4.67	7.49	4.85	-.336	8.92	3.71	13.00
528	-7.76	2.85	2.21	-.541	9.28	2.34	13.06
529	-3.22	4.51	3.11	-.340	5.07	3.71	14.06
530	1.32	3.97	1.64	-.744	5.11	1.71	7.03
531	-4.83	3.84	4.47	-.701	6.88	2.74	11.91
532	-2.75	4.35	2.03	-.468	4.63	3.13	10.32
533	-1.58	2.20	2.61	-.038	3.71	2.66	7.75
534	.55	2.20	2.61	.514	2.85	1.73	6.14
535	9.46	2.22	2.96	-.140	9.91	2.04	13.01
536	.83	9.44	4.94	.844	9.33	4.50	16.06
537	-3.37	2.52	6.13	-.284	6.48	3.17	11.00
538	3.06	2.80	2.17	-.223	4.54	1.79	7.65

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539	-1.29	2.17	-1.20	3.07	3.25	2.36	8.34
540	1.42	2.27	.24	5.08	4.25	3.56	12.22
541	-1.65	1.66	1.70	2.67	3.59	5.41	5.41
542	.03	1.30	3.71	1.44	-286	1.33	6.23
543	1.89	2.82	-4.66	2.87	5.53	3.19	11.10
544	-1.19	5.79	-3.35	4.06	5.24	4.34	14.67
545	-34	2.63	4.39	3.08	5.67	1.35	7.69
546	2.77	1.94	3.64	3.48	-674	2.52	8.89
547	4.33	4.68	-14	6.81	3.20	3.88	15.90
548	-5.18	4.36	-5.54	4.02	8.09	2.55	12.49
549	4.12	5.73	-5.01	7.01	9.09	7.23	22.29
550	-2.37	5.57	-9.25	7.80	11.28	7.12	24.30
551	5.69	7.17	4.50	4.27	9.79	4.50	14.55
552	3.50	4.35	5.35	6.20	8.11	5.37	17.53
553	1.10	3.89	-1.57	4.82	5.66	2.45	9.76
554	-1.63	5.73	5.76	9.87	9.85	7.76	23.00
555	3.46	5.49	7.78	3.64	10.20	2.74	14.05
556	1.00	7.54	-51	3.74	7.23	3.55	14.00
557	1.65	3.29	4.16	3.41	5.70	2.85	9.43
558	-1.12	4.10	1.35	4.88	5.34	3.18	9.75
559	-2.72	2.96	-7.98	9.35	9.67	8.41	25.83
560	2.96	3.08	-3.18	3.67	5.33	3.47	12.85
561	-1.46	3.59	1.15	3.91	5.06	1.71	7.01
562	1.68	1.83	5.83	4.03	6.77	3.03	9.58
563	6.11	7.59	-16.23	10.73	18.61	10.99	37.12
564	-3.00	5.59	3.12	8.79	8.90	6.27	22.78
565	-2.20	6.83	-1.75	5.21	7.68	3.92	13.41
566	-2.74	5.25	3.88	3.59	6.97	3.30	13.23
567	-5.96	3.57	.41	3.05	6.48	3.86	11.76
568	1.10	4.88	-1.32	2.77	5.34	1.52	7.48
569	-4.3	4.46	-5.52	6.03	7.74	4.77	12.50
570	-1.04	6.06	-7.37	5.44	9.44	5.27	18.08
571	-2.87	4.24	-10.83	7.55	11.65	7.97	21.30
572	-.81	2.32	1.52	4.18	4.27	2.32	8.22
573	.81	6.14	1.24	4.88	7.03	2.74	12.01
574	-5.81	4.93	-2.03	6.13	8.62	4.51	15.40
575	.03	3.47	2.81	2.21	4.23	2.35	8.40
576	-3.65	4.51	-7.73	7.83	9.36	8.07	20.46
577	-.03	4.07	-1.07	3.01	4.54	1.84	8.02
578	4.77	4.67	-2.19	4.86	4.50	3.23	13.24
579	-5.66	3.67	.80	1.86	7.63	3.55	11.05
580	-12.23	8.80	-2.88	3.67	12.90	9.00	23.65
581	3.80	8.07	-2.57	8.45	11.37	3.57	17.73
582	.53	6.52	-3.00	2.73	6.67	3.11	10.97
583	-15.66	8.58	-3.72	5.06	16.35	9.48	30.13
584	-8.68	9.51	-3.88	8.02	10.84	11.13	35.83
585	-4.15	7.09	-7.15	5.40	10.66	5.25	21.46
586	5.76	5.19	17.16	12.45	19.01	11.97	33.77
587	-.48	3.86	-2.07	3.25	4.56	2.61	8.31
588	3.57	2.79	-4.06	2.96	6.00	2.96	9.58
589	-.05	2.97	5.33	5.71	6.36	5.26	15.08
590	-.62	2.85	3.72	2.45	6.36	2.16	8.04
591	-2.47	4.16	.89	3.53	5.51	1.73	7.55
592	-1.07	2.96	-2.35	2.88	3.97	2.59	9.27
593	-4.11	6.38	-4.82	4.22	8.01	5.57	17.35
594	-2.62	4.29	-11.40	10.00	12.56	9.72	29.60
595	-5.05	9.53	-4.64	9.85	13.94	4.42	21.83
596	-6.10	6.64	5.19	9.79	12.19	6.60	24.26
597	-2.72	3.45	2.63	4.09	6.01	1.91	8.52
598	-.49	3.17	4.82	3.35	5.79	3.13	11.24

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599	-7.73	6.75	-3.78	3.66	-7.67	8.68	6.46	19.68
600	4.03	11.74	-3.78	4.29	-2.98	10.30	8.36	27.34
601	-3.70	3.25	-9.2	2.58	-4.46	4.70	2.46	8.15
602	3.30	3.22	1.14	2.58	-0.18	4.27	3.17	7.94
603	7.85	2.15	.84	2.64	-6.10	8.30	2.03	12.91
604	3.84	4.32	.21	4.80	-2.09	6.56	3.07	10.64
605	4.84	4.67	-1.97	4.57	-4.75	7.16	3.92	13.31
606	-5.20	4.76	-6.83	5.55	-7.42	10.65	2.86	15.22
607	-2.39	6.52	16.14	4.35	.063	17.50	3.96	21.89
608	5.98	2.10	-15.33	5.25	-1.59	16.64	5.03	23.70
609	-1.22	3.86	-1.21	3.53	-3.00	4.50	2.75	8.98
610	14.27	11.47	1.10	3.00	-2.63	14.66	11.35	31.23
611	-8.15	10.28	-10.05	9.38	.865	13.69	13.07	37.41
612	-2.61	4.93	-6.3	4.33	.714	6.01	3.15	11.96
613	-3.04	3.70	.25	2.64	.825	4.62	2.61	8.04
614	.67	2.69	1.88	3.03	.368	3.59	2.49	8.12
615	-6.41	5.80	-2.06	2.31	.502	7.16	5.67	16.52
616	.63	2.68	1.81	4.32	.001	4.34	2.92	9.13
617	-6.80	4.95	1.08	2.37	.467	7.32	4.79	14.63
618	-4.97	5.02	.76	1.99	.199	6.65	2.73	11.15
619	2.50	5.08	.75	2.70	.093	5.37	2.81	8.94
620	2.54	2.85	7.09	5.59	.412	7.97	5.62	16.31
621	1.56	3.84	1.78	5.17	.065	6.12	2.28	8.50
622	-1.09	5.09	-6.57	4.58	.345	8.36	4.19	17.07
623	4.20	5.56	-14.17	6.65	-3.52	15.50	7.09	23.27
624	8.16	6.16	-3.96	3.38	.154	10.15	5.07	16.49
625	7.61	5.41	-.37	4.71	-.802	9.56	3.63	15.59
626	3.26	3.71	-.82	3.75	.784	5.68	1.97	10.37
627	-6.95	1.32	3.11	3.33	-1.00	8.13	1.90	10.47
628	4.70	.95	-2.05	1.95	-.340	5.34	1.45	7.97
629	4.46	1.91	-8.89	10.24	-.432	12.11	7.35	28.35
630	.70	5.17	-11.49	8.26	-.791	12.68	7.92	29.07
631	4.76	3.76	-2.80	8.51	-.364	8.85	5.65	18.19
632	9.30	7.05	5.49	4.43	.863	11.36	7.43	22.83
633	-8.95	6.12	1.92	1.57	.860	10.00	4.62	18.16
634	-1.49	3.92	-5.45	4.59	.834	6.65	4.73	14.74
635	-7.15	2.87	-1.63	4.35	-.324	8.37	2.94	11.52
636	.91	2.78	-1.14	3.11	.087	3.84	1.74	6.11
637	.89	6.48	-4.52	4.92	-.542	7.20	5.59	18.71
638	1.79	3.08	2.17	4.67	-.366	5.22	3.03	10.43
639	2.91	3.01	4.32	2.36	-.346	6.08	1.84	8.66
640	3.09	2.38	1.76	3.72	.143	4.71	2.94	10.22
641	-2.95	10.39	-.59	5.50	-.247	9.05	7.42	22.70
642	10.44	8.27	-.51	6.60	-.440	12.63	7.37	24.42
643	-1.04	5.93	2.08	3.25	.301	5.97	3.34	11.96
644	2.99	4.54	2.54	4.86	.577	6.39	3.90	14.64
645	4.44	6.27	-8.10	4.87	-.646	10.21	6.43	19.58
646	8.80	2.37	-8.92	4.33	-.342	12.86	3.85	17.64
647	-10.87	2.25	4.47	3.44	-.468	12.04	2.99	15.57
648	-1.17	4.27	-1.18	1.38	-.294	3.86	2.52	7.30
649	-4.17	1.14	2.44	2.11	-.249	5.18	1.34	7.49
650	-1.54	2.61	2.91	2.17	-.067	4.32	1.60	6.33
651	8.91	4.58	-4.68	3.42	-.692	10.32	5.17	15.96
652	1.58	6.78	4.46	5.47	.325	8.25	4.88	17.45
653	2.65	5.97	-.90	1.79	-.280	4.44	5.02	15.80
654	2.63	2.94	-1.51	1.79	-.795	3.55	2.82	8.07
655	1.73	2.78	1.52	1.71	-.632	3.61	1.35	5.19
656	3.89	4.94	.63	1.97	-.388	5.11	4.02	13.13
657	.14	1.91	5.15	4.54	.785	5.45	4.56	15.89
658	-4.53	1.24	1.47	2.40	-.300	5.16	1.66	8.31

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659	-7.68	6.45	-1.85	4.88	10.35	3.36	17.05
660	-3.05	3.67	-1.47	1.76	4.28	2.95	8.91
661	6.96	8.61	.82	9.32	12.51	6.18	19.68
662	4.03	6.11	-.95	5.06	7.79	3.61	12.63
663	6.56	3.98	3.12	3.36	8.19	3.28	15.27
664	3.94	3.78	-2.34	4.90	6.75	3.21	11.03
665	6.47	5.07	.25	3.12	7.74	3.84	13.73
666	11.91	3.82	2.57	3.34	12.41	4.39	18.80
667	5.46	3.42	6.11	5.06	8.63	5.39	16.10
668	.73	3.39	1.56	1.68	3.25	2.38	6.95
669	6.89	2.86	3.30	3.64	8.50	2.37	12.10
670	7.01	6.95	.56	3.91	6.74	6.74	17.77
671	3.63	4.46	4.70	1.77	8.08	6.74	12.18
672	1.45	3.43	2.59	1.76	6.96	2.85	12.18
673	1.54	2.08	-.24	3.78	4.08	2.43	8.12
674	-2.08	4.48	-3.54	5.21	3.65	2.48	7.01
675	-1.95	3.13	2.75	4.15	6.54	4.20	13.96
676	4.02	6.75	-4.19	4.81	4.56	4.02	12.51
677	.91	3.91	.53	2.24	8.18	5.54	17.06
678	-2.22	10.39	.87	4.21	3.44	2.83	9.33
679	1.35	3.21	3.17	2.05	5.79	9.69	29.60
680	2.99	1.78	.71	5.73	4.57	2.05	7.16
681	-1.09	1.98	3.31	2.30	5.32	3.79	13.74
682	6.87	6.67	3.15	2.70	4.13	1.90	7.99
683	-3.26	3.62	-14.94	10.29	8.53	5.82	20.00
684	-1.74	2.87	-3.78	3.02	16.00	9.69	33.43
685	-3.67	4.77	3.32	4.34	5.37	2.03	9.38
686	2.18	2.33	3.01	4.61	6.90	3.91	11.93
687	1.19	4.69	1.10	1.39	5.21	3.39	11.18
688	-.91	3.46	-.47	2.28	4.29	2.43	9.04
689	-.45	1.42	1.16	4.16	3.35	2.34	6.75
690	2.20	3.77	-3.81	2.42	3.56	2.56	7.46
691	1.34	4.45	-2.14	1.60	5.45	2.86	9.82
692	-1.77	5.48	-2.58	3.16	4.39	2.77	8.98
693	-6.73	5.40	2.58	3.60	4.90	4.87	15.91
694	-3.84	6.47	-8.71	4.23	11.39	6.11	21.93
695	6.90	4.21	-6.19	6.45	10.01	5.45	18.87
696	5.54	4.45	1.96	1.21	7.33	4.08	13.32
697	1.68	5.38	2.29	3.84	7.11	4.22	16.04
698	-.27	3.32	2.21	2.46	5.12	3.72	11.72
699	2.30	2.43	3.37	2.35	6.36	4.09	14.09
700	4.05	5.34	1.18	1.63	1.61	2.82	10.34
701	.22	2.54	-1.17	3.05	6.08	2.38	7.25
702	1.42	3.36	.72	3.05	3.20	2.17	8.51
703	-6.61	4.32	1.59	3.54	4.88	2.17	13.01
704	-2.06	2.33	-1.28	3.63	7.73	3.96	6.89
705	-3.27	1.83	-3.14	4.43	5.56	3.33	11.79
706	-2.68	4.17	-3.89	3.46	6.08	3.55	12.67
707	2.16	2.04	2.99	1.62	3.98	2.06	6.08
708	4.44	3.10	1.29	2.53	5.33	2.82	9.20
709	-4.35	5.30	-3.76	3.98	7.65	3.87	12.19
710	-.16	2.44	-2.47	2.15	3.62	1.61	5.32
711	4.16	2.11	1.76	3.37	5.60	1.82	9.76
712	2.44	2.92	5.34	4.13	6.95	3.11	10.65
713	2.74	3.29	4.82	2.40	3.30	3.00	11.27
714	2.65	2.04	2.02	3.18	5.98	1.61	6.31
715	1.61	.89	-2.18	2.06	3.20	1.33	5.39
716	2.37	2.09	-1.99	3.14	4.44	1.65	6.95
717	.51	1.82	-1.02	1.99	2.33	1.17	4.00
718	-.40	3.08	-3.55	2.67	4.79	2.25	8.72

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719	.52	2.41	3.04	2.59	-.459	3.90	2.47	7.96
720	3.03	2.15	-.33	1.86	-.260	3.70	1.74	6.52
721	.92	2.35	5.49	4.45	-.377	6.75	2.93	10.81
722	.23	2.29	4.77	3.86	-.389	5.36	3.66	11.36
723	-1.77	4.41	2.93	5.34	-.311	6.40	3.81	10.39
724	-1.43	1.76	-7.48	5.01	-.836	7.74	5.10	17.41
725	.48	3.23	1.71	3.55	-.470	4.13	2.66	8.80
726	4.17	4.54	3.45	1.58	-.030	6.78	2.04	9.02
727	-5.13	3.68	-1.00	2.35	-.416	5.77	3.50	11.44
728	-4.69	5.82	-5.87	3.71	-.716	8.11	6.09	20.25
729	-14.32	14.82	-1.71	5.11	-.371	16.31	13.39	38.57
730	-.20	7.27	-5.05	6.04	-.269	9.16	4.77	15.87
731	2.58	6.58	3.00	6.25	-.787	7.02	6.63	18.65
732	3.54	4.24	3.92	4.20	-.125	7.15	3.01	10.99
733	-8.29	5.38	-3.85	2.90	-.045	9.73	4.98	18.30
734	-2.93	4.90	-1.06	4.01	-.094	5.56	3.99	12.36
735	5.34	6.51	2.92	3.90	-.222	7.53	5.93	16.98
736	2.31	6.66	2.09	3.54	-.528	7.34	2.53	11.46
737	-1.00	5.20	8.71	8.71	-.851	11.23	6.04	18.49
738	-4.20	4.87	4.45	7.71	-.813	10.05	3.27	15.87
739	-.91	2.07	1.68	2.77	-.311	3.55	1.31	5.44
740	1.68	2.26	-.53	2.51	-.246	3.20	1.79	6.54
741	-10.15	4.55	3.21	9.49	-.271	13.03	6.80	25.18
742	-5.86	4.31	4.11	7.64	-.005	9.89	4.87	16.79
743	2.30	3.34	.67	2.70	-.291	4.14	2.31	8.52
744	3.06	5.00	2.49	3.97	-.520	6.64	2.87	10.44
745	-1.72	6.71	-3.79	2.98	-.476	7.46	3.18	13.96
746	9.46	8.74	-3.69	3.55	-.627	11.29	7.83	24.60
747	1.92	2.82	9.84	4.87	-.560	10.38	4.85	17.19
748	-1.57	2.42	10.45	5.60	-.488	11.29	4.37	17.90
749	-8.18	5.48	-4.86	6.33	-.037	11.38	5.05	15.96
750	1.54	5.00	-17.11	14.76	-.027	18.32	14.01	37.73
751	-1.55	2.59	7.49	5.68	-.267	8.30	5.20	14.82
752	.36	4.88	3.36	3.23	-.262	5.84	2.88	9.36
753	-7.99	6.19	-9.7	4.62	-.704	9.06	6.32	19.04
754	-3.73	6.63	-7.45	6.46	-.787	9.48	7.89	25.77
755	-1.59	3.52	.24	3.76	-.234	4.80	1.77	8.59
756	-3.59	2.50	1.44	3.02	-.244	4.52	3.03	9.92
757	5.16	5.44	-6.07	4.45	-.124	9.52	4.29	14.66
758	-.13	3.01	-.59	3.22	-.769	3.80	1.84	7.02
759	-.07	3.60	-1.60	5.68	-.571	5.48	3.72	11.93
760	-8.77	6.52	6.09	7.62	-.575	12.96	6.22	24.31
761	-1.73	5.34	-3.38	4.61	-.028	6.68	3.91	12.80
762	8.92	7.07	-4.96	9.47	-.908	14.26	5.13	22.59
763	-.70	2.81	-9.23	3.89	-.730	9.65	3.78	15.04
764	-7.73	1.94	-4.75	8.50	-.218	8.59	4.25	13.35
765	2.23	4.16	5.15	2.68	-.066	6.66	3.13	9.22
766	5.18	2.68	.09	6.66	-.289	8.06	2.81	12.38
767	1.20	5.01	-1.79	1.92	-.150	4.58	3.18	9.03
768	-.85	4.34	1.93	2.25	-.292	4.37	2.68	9.92
769	1.14	2.27	1.32	3.49	-.507	3.74	2.20	5.85
770	4.66	3.43	-.72	3.77	-.782	5.74	3.70	10.67
771	-1.83	3.83	-1.04	2.39	-.615	4.14	2.42	8.55
772	4.70	3.66	5.50	4.16	-.622	7.65	4.85	16.60
773	1.29	2.50	2.31	2.21	-.350	3.56	2.17	7.54
774	6.65	4.31	-.33	3.97	-.067	7.93	3.63	12.11
775	1.44	2.69	-.43	3.21	-.645	3.93	1.59	6.55
776	6.40	2.36	-.32	2.37	-.308	6.78	2.37	9.65
777	-7.09	5.80	-.59	4.72	-.406	9.09	4.38	15.86
778	-5.54	7.56	-5.12	5.80	-.565	9.85	6.71	22.30

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779	.03	2.35	1.10	3.26	- .670	3.54	1.81	6.46
780	-.87	2.43	.93	1.34	-.216	2.72	1.03	4.10
781	10.59	5.30	-.25	3.36	-.881	11.22	4.87	17.54
782	3.73	5.81	3.13	7.12	.247	7.82	6.46	17.45
783	-7.24	4.91	-7.64	4.74	.771	10.76	6.40	18.01
784	-3.02	3.90	-8.26	6.53	.684	9.32	6.85	22.96
785	1.54	4.77	.37	4.26	-.023	4.90	4.04	11.67
786	7.39	6.39	3.17	5.99	.641	10.02	6.00	21.42
787	3.13	4.37	-5.77	5.39	-.120	8.07	4.79	15.00
788	9.27	6.76	1.06	8.16	.863	11.84	7.19	25.43
789	-.34	3.94	-11.77	9.46	.112	12.85	8.66	24.76
790	-2.50	3.06	-2.75	9.01	.631	7.87	5.96	20.65
791	2.22	4.47	-.05	3.14	.787	4.79	3.06	10.90
792	5.85	5.78	1.75	4.41	-.018	7.76	5.16	15.26
793	.10	5.59	4.28	4.16	-.676	6.80	4.09	13.76
794	-2.26	4.94	-9.31	7.40	.738	10.68	7.33	21.38
795	1.07	2.05	6.93	1.99	.298	7.36	1.61	9.49
796	.07	2.02	2.23	4.14	.640	4.65	1.50	6.74
797	4.15	2.98	5.11	5.37	-.515	8.03	3.69	15.44
798	-.35	3.98	-4.24	6.54	.518	6.98	4.86	17.86
799	-1.35	3.51	-.41	3.14	-.214	4.39	1.55	6.57
800	-.90	.82	.40	1.89	.630	1.95	1.01	3.32
801	4.70	3.46	-.55	2.74	.626	5.54	3.15	11.08
802	4.97	4.60	-2.82	2.87	-.106	6.96	3.37	11.51
803	-2.60	4.16	3.51	3.24	-.326	5.76	3.42	10.55
804	-.76	4.23	-.15	2.35	-.076	4.39	1.44	6.07
805	-.92	3.99	-.57	3.88	-.384	4.74	2.57	9.14
806	-5.46	5.52	1.59	2.90	-.453	7.14	4.20	15.16
807	.72	3.90	2.51	2.55	-.701	4.62	2.26	9.79
808	2.85	2.65	-2.32	2.71	.013	4.34	2.88	7.50
809	-.96	2.95	-.54	2.95	.142	3.60	1.98	6.95
810	-.05	2.74	.52	3.31	.391	3.79	1.53	6.11
811	.46	3.40	-1.60	3.58	.142	4.24	2.65	8.60
812	1.44	3.07	-3.13	3.01	-.072	4.91	2.12	8.35
813	.37	3.96	.18	2.33	.100	3.86	2.06	8.00
814	4.71	2.74	-2.65	3.35	-.374	6.04	3.23	12.99
815	-4.18	2.61	-2.36	2.56	.319	5.32	2.71	9.82
816	-2.26	4.06	-4.89	4.86	.682	6.22	5.38	16.61
817	-2.45	2.34	-.93	2.71	-.235	4.05	1.38	6.13
818	-.77	3.44	-4.82	3.32	.050	5.92	3.17	10.01
819	1.16	2.67	4.26	3.52	-.516	5.52	2.65	8.51
820	4.60	5.36	-.19	4.72	-.219	6.98	4.42	13.79
821	2.56	3.91	-2.10	4.86	.394	6.01	3.17	12.45
822	2.21	2.31	.33	5.93	.601	5.67	3.08	10.19
823	-2.78	3.21	.13	3.33	.284	4.82	1.90	7.57
824	-2.99	5.26	2.12	4.23	-.179	6.97	2.33	10.40
825	2.98	2.48	-3.83	6.10	-.295	7.15	3.44	12.20
826	5.06	8.71	-2.45	7.47	-.906	9.40	8.17	24.05
827	-7.52	6.07	.69	3.31	-.332	8.39	5.69	15.21
828	-6.78	7.46	-2.28	3.42	.723	7.88	7.40	23.62
829	-2.69	1.69	1.51	2.50	-.847	3.36	2.67	9.02
830	-.64	1.69	2.08	3.08	-.520	3.42	2.10	6.04
831	5.59	4.91	-8.28	8.08	-.750	10.95	8.15	24.42
832	3.55	4.22	6.04	6.69	.157	9.02	5.08	17.29
833	2.54	2.23	2.11	3.05	.835	4.26	2.46	7.94
834	2.69	3.48	3.68	3.85	-.292	5.85	3.40	9.36
835	-3.54	2.76	1.53	3.76	-.850	4.49	3.98	12.43
836	1.23	2.35	1.73	1.25	-.370	7.02	1.33	4.77
837	5.47	2.75	3.85	4.39	.658	7.23	4.28	13.26
838	-.02	4.20	-.95	2.32	.756	4.01	2.38	7.36

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839	1.45	4.06	9.05	7.75	- .586	10.89	6.08	23.54
840	7.30	5.12	2.69	3.36	.026	8.80	4.28	14.10
841	-2.1	4.56	4.06	7.15	.516	7.47	5.20	16.83
842	-3.50	3.53	.41	1.98	- .515	4.17	3.26	10.83
843	5.10	3.39	3.91	3.21	.211	7.06	3.48	10.34
844	-9.24	9.13	-10.03	11.51	.764	15.20	12.82	31.80
845	1.14	3.93	1.33	4.80	.659	5.09	3.51	11.36
846	-3.30	4.12	4.92	8.03	- .772	8.34	6.49	18.08
847	-1.31	5.80	-3.08	4.57	- .007	7.24	2.71	10.43
848	2.79	2.40	-4.27	5.21	.129	6.83	3.04	10.99
849	-14.80	9.40	-7.67	6.32	.802	16.90	10.93	32.70
850	-2.37	6.53	-5.34	3.55	.290	8.30	3.94	14.82
851	.57	4.38	2.78	4.36	- .501	5.88	2.82	10.44
852	-1.51	1.66	3.28	3.10	- .261	4.03	2.95	7.69
853	-2.12	6.98	-6.35	5.70	.196	9.83	4.67	16.58
854	- .34	7.08	-9.48	10.73	.005	13.30	8.13	28.55
855	-2.00	4.45	2.77	3.43	- .235	5.41	3.38	10.54
856	1.68	1.92	2.88	3.53	.594	4.41	2.58	8.77
857	-9.36	7.52	-5.34	6.34	.827	11.36	9.05	26.26
858	-5.85	8.37	-4.42	11.69	.360	12.79	9.01	24.73
859	8.84	4.09	.14	5.54	.446	10.12	4.44	18.34
860	2.55	2.78	-5.90	4.07	.514	7.43	2.91	10.71
861	.60	5.88	5.71	4.29	.515	8.03	4.11	14.02
862	3.60	2.71	2.82	4.22	.227	6.23	2.17	10.38
863	-7.30	4.59	-9.94	8.02	.068	13.74	6.61	25.93
864	-7.83	7.84	-11.77	8.97	.780	14.84	10.90	35.50
865	3.55	4.24	4.63	4.59	.316	7.41	3.89	11.81
866	3.87	3.89	.31	2.96	- .304	5.24	3.12	9.50
867	1.62	3.85	.49	2.41	- .101	3.80	2.73	10.03
868	.07	3.55	-3.85	2.40	.467	4.77	3.04	10.56
869	-1.53	3.21	2.44	2.18	.592	4.48	1.29	6.55
870	1.93	4.05	- .23	3.00	.408	4.55	2.46	8.84
871	-4.10	3.07	3.70	2.62	.151	6.16	2.80	9.21
872	-2.29	3.69	2.94	3.16	.621	5.30	2.72	9.90
873	-7.51	3.28	-3.92	2.78	- .015	8.87	3.24	13.11
874	-4.31	5.39	1.83	4.17	- .098	6.83	4.26	13.08
875	-8.66	5.62	-4.81	6.51	.696	11.27	6.40	19.69
876	.29	5.97	.97	6.81	.912	7.89	3.47	14.14
877	.77	3.56	-9.15	4.49	.003	9.83	4.32	16.57
878	.48	3.78	-2.85	6.26	.083	3.27	3.27	13.27
879	6.62	2.10	5.20	5.77	.374	9.41	4.17	14.57
880	.60	3.95	6.49	2.43	- .598	7.59	2.09	10.69

MEAN DU(M/S) = .11
 MEAN DV(M/S) = -.15
 SD DU(M/S) = 6.43
 SD DV(M/S) = 6.96
 R(DU,DV) = .13
 MEAN W(M/S) = 7.60
 SD W(M/S) = 5.66
 SD MEAN(M/S) = 3.24
 MEAN MAXW(M/S) = 14.56
 SD MAXW(M/S) = 7.13

SANTA MONICA 6HR WIND CHANGE 3-9 KM SUMMER

NP	U-COMPONENT CHANGE			V-COMPONENT CHANGE			R	VECTOR WIND CHANGE			MAX
	MEAN	STD.DEV.		MEAN	STD.DEV.			MEAN	STD.DEV.		
1	2.25	3.26	-2.95	2.29	2.46	-1.06		4.56	2.77	8.56	
2	-6.66	3.46	-1.59	2.46	2.46	.888		7.24	3.39	12.51	
3	2.92	2.54	2.08	2.50	4.01	.702		4.14	2.77	9.26	
4	.93	2.72	-1.46	4.01	3.58	.759		4.45	1.95	7.37	
5	-1.09	1.91	4.71	3.58	2.70	.258		5.31	3.29	9.24	
6	-1.12	3.62	-1.94	2.70	1.24	.500		4.47	1.19	6.03	
7	2.96	2.83	1.28	1.24	2.02	.132		3.86	2.07	6.22	
8	3.00	1.92	-.29	2.02	1.97	.949		3.50	2.02	6.56	
9	-3.13	2.03	.74	1.97	1.51	.073		3.78	1.83	5.75	
10	-1.05	4.07	.27	1.51	3.90	.435		3.53	2.38	7.55	
11	-2.75	1.52	-1.38	3.90	1.90	.194		4.76	1.44	7.25	
12	-.29	2.07	1.96	1.90	2.17	.606		2.93	1.56	5.18	
13	-.96	2.91	5.86	2.17	3.79	.405		6.48	2.32	11.52	
14	-.98	2.88	-.75	3.79	2.14	.063		4.15	2.09	6.49	
15	2.77	2.52	.16	2.14	4.10	.128		3.82	1.71	6.64	
16	2.53	1.90	-1.81	4.10	2.82	.804		4.18	3.37	9.93	
17	-.37	2.29	-.57	2.82	2.35	-.448		2.89	2.00	5.50	
18	-1.10	4.38	1.06	2.35	2.79	.140		4.56	1.78	6.38	
19	.62	1.57	-.21	2.79	1.89	.035		2.98	.63	4.04	
20	-.65	3.03	-.14	1.89	2.00	.222		2.50	.97	4.00	
21	-1.13	3.61	1.98	2.00	2.57	.058		3.66	2.45	6.69	
22	1.21	3.16	-1.54	2.57	2.03	.206		3.79	2.08	7.81	
23	1.72	1.59	.91	2.03	1.53	.358		3.01	.69	3.95	
24	2.03	2.17	.23	1.53	2.74	.248		2.74	1.78	5.87	
25	-.36	3.46	-.62	2.06	3.29	.026		3.57	1.40	5.29	
26	-2.24	2.78	-1.88	3.29	1.58	.494		3.91	3.27	8.72	
27	-1.08	1.31	1.11	1.58	3.52	.380		2.34	.80	3.17	
28	1.60	2.67	1.54	3.52	2.60	.652		4.44	1.52	6.71	
29	-2.50	3.51	2.04	2.60	5.32	-.468		4.45	2.86	9.96	
30	-4.82	4.78	-3.05	5.32	2.94	.759		7.51	4.83	14.52	
31	2.91	2.13	.22	2.94	2.75	.211		3.90	1.79	6.85	
32	3.01	2.03	.99	2.75	6.48	.246		3.76	2.63	7.91	
33	-.36	4.50	5.97	6.48	3.54	.090		7.69	5.91	14.46	
34	-.72	3.42	3.02	3.54	1.50	.821		4.51	3.43	11.74	
35	-.60	3.95	-.08	1.50	3.24	.637		3.36	2.26	7.01	
36	1.96	3.42	-1.67	3.24	2.43	-.805		4.10	3.21	10.83	
37	-1.50	2.60	-1.47	2.43	1.04	.331		3.63	1.55	6.60	
38	-2.25	1.98	1.45	1.04	3.79	.247		3.05	1.57	5.24	
39	1.73	1.93	2.61	3.79	3.34	-.187		4.19	2.99	10.50	
40	4.04	2.85	.60	3.34	3.02	.641		5.41	2.15	8.77	
41	1.24	1.26	1.24	3.02	2.78	.014		3.27	1.36	5.36	
42	-1.06	2.06	.27	2.78	1.75	-.194		2.81	2.03	6.55	
43	.19	2.69	2.48	1.75	3.05	.222		3.75	1.08	5.48	
44	4.60	3.26	2.60	3.05	5.68	.518		5.83	3.59	10.09	
45	-1.78	1.69	-2.91	5.68	1.85	-.082		6.23	1.84	8.04	
46	-.50	4.26	-1.69	1.85	1.94	.274		4.26	2.01	6.89	
47	-2.01	1.89	.29	1.94	1.74	.194		3.05	1.13	5.30	
48	-.30	1.82	2.21	1.74	1.85	.317		2.96	1.38	4.50	
49	2.99	1.75	.46	1.85	3.44	-.365		3.44	1.84	6.31	
50	1.02	2.56	3.54	3.44	1.07	.187		4.99	2.27	8.34	
51	-6.90	2.02	1.80	1.07	2.94	.348		7.25	1.82	9.38	
52	-1.97	1.28	3.73	2.94	2.52	-.446		4.43	2.87	10.28	
53	-.09	2.34	-1.60	2.52	1.02	.626		2.96	2.16	7.10	
54	-1.45	1.64	-2.14	1.02	3.15	.748		2.90	1.30	5.00	
55	-2.06	4.04	-1.11	3.15	1.49	.790		3.98	3.77	11.91	
56	-1.78	2.84	1.56	1.49	3.62	.106		4.04	2.99	5.62	
57	-.39	1.75	-3.15	3.62	2.78	.343		5.30	2.99	7.97	
58	-1.79	3.04	-4.48	2.78		.757		5.30	3.38	12.17	

59	-2.50	1.83	2.81	1.91	.453	4.19	1.73	6.29
60	1.51	3.48	3.14	1.47	.503	4.45	2.32	8.49
61	.26	1.92	-.85	1.46	.116	2.29	.81	3.11
62	2.22	2.53	-.44	1.89	.174	3.44	1.46	6.48
63	-2.48	1.80	-3.95	2.98	.307	5.12	2.63	8.07
64	.47	1.56	-.16	3.56	.149	3.16	1.93	7.20
65	-.14	1.91	-.28	2.46	.582	2.43	1.70	5.75
66	.01	1.43	-1.91	1.00	-.070	2.42	.67	3.34
67	-.73	3.08	-3.38	2.84	.522	4.70	2.40	8.88
68	.40	2.46	-1.21	2.32	-.221	3.15	1.33	4.70
69	-.65	3.13	1.71	2.72	-.726	3.68	2.30	7.60
70	-1.29	1.43	.86	2.45	-.451	2.63	1.67	4.81
71	1.12	2.50	-.10	2.79	-.089	3.36	1.54	5.58
72	2.01	1.84	.31	2.40	-.225	3.18	1.46	5.04
73	.30	3.47	.68	1.62	-.242	3.36	1.48	6.08
74	-1.24	5.26	1.53	3.80	-.891	5.74	2.86	9.61
75	-2.52	2.24	-6.37	4.66	.768	6.97	4.97	16.24
76	1.02	1.20	-.16	2.09	-.691	2.25	1.09	4.33
77	2.24	2.48	-2.31	5.04	-.698	4.54	4.42	14.16
78	3.35	2.77	-.45	3.34	-.838	5.00	1.74	8.24
79	1.22	1.31	1.41	2.35	-.336	3.05	.67	4.00
80	.83	1.43	1.09	4.04	-.564	3.86	1.76	6.01
81	-1.22	1.03	1.71	1.96	-.778	2.78	1.01	4.17
82	-.29	.71	1.10	1.86	.721	2.00	.91	3.72
83	.94	1.93	-.28	1.95	.338	2.49	1.18	4.23
84	-.25	2.96	2.10	1.48	-.224	3.12	2.20	6.89
85	-2.19	2.13	-.52	3.06	.476	3.51	2.32	8.07
86	-2.92	3.49	2.11	2.02	-.182	4.50	2.78	8.02
87	-3.19	1.47	-.61	2.05	.037	3.70	1.65	6.02
88	.80	1.72	-.63	2.28	-.268	2.64	1.10	4.02
89	-.85	1.83	-.19	2.62	-.073	2.92	1.08	4.13
90	-.69	1.82	1.09	3.36	.527	3.15	2.24	8.18
91	2.37	1.44	.37	2.32	-.541	3.25	1.37	5.43
92	.31	2.39	1.86	3.40	.130	3.81	2.12	7.87
93	-1.72	2.69	-.26	3.39	.121	4.21	1.26	5.85
94	-2.08	2.95	-1.81	2.35	.108	3.94	2.23	8.58
95	-1.22	2.79	-.98	2.71	.385	3.78	1.16	5.57
96	3.39	2.36	1.77	1.34	-.410	4.27	1.80	6.30
97	2.17	2.85	-1.50	2.23	.475	3.75	2.20	6.14
98	-.26	3.56	-1.10	2.65	-.707	4.12	1.20	5.71
99	-1.49	3.18	-.42	2.34	-.428	3.28	2.42	7.32
100	.74	3.10	-2.02	2.76	-.248	3.98	2.03	7.57
101	-.27	2.13	2.31	2.47	-.389	3.53	1.55	5.65
102	1.48	2.04	2.50	2.30	-.727	3.93	1.10	5.30
103	-1.85	2.42	-1.80	2.82	-.027	3.92	1.91	6.61
104	-1.41	1.88	-2.84	4.71	.171	4.62	3.55	9.97
105	-1.42	2.73	2.56	1.75	.512	3.98	1.44	5.93
106	-.29	2.47	1.42	2.44	.454	3.15	1.70	5.06
107	2.04	2.58	.07	1.80	-.434	3.27	1.51	5.44
108	3.29	3.25	.45	2.21	.189	3.66	2.48	8.04
109	3.26	4.52	2.84	3.16	.714	6.02	3.16	10.70
110	6.07	3.89	3.49	2.65	.924	7.12	4.50	13.35
111	5.16	2.64	-1.74	5.70	.811	7.53	2.80	11.92
112	3.31	2.42	-5.17	5.01	.488	7.71	2.34	10.75
113	.86	1.31	.22	1.87	-.377	2.09	1.02	3.84
114	.92	4.00	.96	2.49	.280	3.98	2.39	8.01
115	-.77	3.14	2.02	1.82	.438	3.81	1.31	5.56
116	3.63	2.68	1.08	2.78	.337	4.75	2.31	8.00
117	.14	1.57	1.06	2.05	.228	2.32	1.31	4.55
118	-1.47	1.48	-1.02	1.65	-.053	2.61	.83	3.47

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119	-01	2.95	-1.88	1.32	-280	3.14	1.74	6.03
120	-2.39	3.92	-1.44	4.21	-524	5.26	3.15	10.70
121	-41	2.91	-45	3.10	.730	3.84	1.17	5.90
122	1.30	.84	-45	2.10	.000	2.30	1.08	3.60
123	.28	1.48	2.74	3.37	-.076	3.93	2.10	7.13
124	2.78	1.93	-20	1.35	-.572	3.05	1.93	6.01
125	-73	1.81	-3.97	3.29	-.542	4.91	2.24	8.64
126	-1.24	2.04	-7.22	2.62	-.282	7.62	2.42	10.82
127	-1.24	2.43	-80	1.78	-.045	3.04	.90	4.01
128	.18	1.17	-2.68	3.16	-.525	3.56	2.23	6.76
129	.00	1.97	-.55	2.49	.150	2.68	1.44	5.48
130	1.86	1.60	.53	3.15	.049	3.15	2.29	7.33
131	.03	1.89	1.13	2.18	.742	2.59	1.41	4.60
132	.61	2.84	-.70	1.59	.397	2.96	1.16	4.13
133	.78	2.51	-.19	2.32	-.525	3.21	.67	3.81
134	-.77	2.38	1.23	3.24	.251	3.66	1.71	6.00
135	-2.36	1.17	.53	3.22	.638	3.08	.97	4.31
136	-1.81	1.17	3.02	2.09	-.819	4.27	2.22	6.93
137	-.62	3.20	1.97	2.28	-.009	3.49	2.50	6.51
138	.40	2.39	-.71	2.35	.725	2.80	1.69	5.46
139	.48	1.50	-1.24	4.93	.742	4.01	3.13	9.63
140	.82	1.94	-.14	3.25	-.403	3.13	1.93	6.91
141	2.30	3.75	-1.76	1.08	-.093	4.25	1.98	6.75
142	-1.12	2.73	.17	3.25	.635	3.85	1.48	6.47
143	2.66	2.65	.82	3.22	.209	4.26	2.31	7.29
144	2.05	2.50	1.22	3.00	.393	4.05	1.66	6.26
145	-3.89	1.78	-4.09	3.45	.634	6.04	3.11	10.52
146	-2.46	2.61	-2.76	3.23	.475	4.55	3.01	10.29
147	-2.00	3.34	-4.27	1.20	.073	5.64	1.18	6.58
148	-2.59	4.10	1.60	1.61	.324	4.00	3.40	10.27
149	-.55	1.56	.88	1.32	.895	2.01	.85	3.01
150	.23	.75	-2.33	1.26	-.044	2.49	1.15	4.35
151	.35	1.70	1.76	1.02	-.226	2.40	.98	3.23
152	.66	1.45	1.56	1.90	-.534	2.48	1.37	4.01
153	-1.38	.77	-1.71	5.06	-.110	4.51	2.85	10.39
154	3.08	1.81	2.03	1.61	-.073	4.18	1.13	6.07
155	.08	1.12	-4.88	4.01	-.289	5.14	3.78	10.33
156	9.39	4.11	6.43	5.26	.730	12.14	4.87	19.76
157	-1.11	2.71	-.55	2.21	-.561	3.17	1.53	5.24
158	-.88	3.11	-.91	2.55	.370	3.58	1.76	6.39
159	-.36	2.19	1.08	1.85	-.364	2.79	.81	3.99
160	1.54	1.92	2.61	1.28	.584	3.39	1.63	6.17
161	.19	3.13	.91	1.39	-.545	2.92	1.67	5.90
162	.65	2.38	1.66	2.07	-.793	3.14	1.48	4.90
163	.73	3.48	-1.22	2.50	-.107	3.97	1.51	6.43
164	1.44	3.18	.54	3.44	.408	4.26	1.90	7.29
165	.05	.83	2.35	2.04	.304	2.93	1.12	5.13
166	.48	2.20	-.44	3.53	-.386	3.58	1.69	6.63
167	1.68	1.12	-1.06	3.21	-.285	3.58	1.11	5.62
168	2.37	3.75	.16	.91	-.174	3.54	2.63	8.08
169	3.55	2.08	-.04	2.34	-.087	4.08	2.26	7.27
170	3.11	1.90	-2.58	2.37	-.428	4.52	2.11	7.31
171	4.22	2.18	-.68	2.72	.665	4.89	2.37	8.59
172	-1.43	4.80	-1.92	1.53	.753	4.56	2.79	8.78
173	-.22	4.62	.67	2.62	.706	4.43	2.44	9.40
174	-9.24	4.93	-1.73	3.80	.378	10.01	4.98	17.11
175	-3.04	2.43	.85	2.17	.152	4.00	1.89	6.60
176	1.47	3.59	4.00	2.74	.481	5.48	2.54	8.86
177	-8.66	3.05	-6.85	4.55	.241	11.61	3.88	16.12
178	-6.56	2.11	-3.16	3.02	-.083	7.73	2.41	9.75

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179	-2.89	5.18	-91	1.54	4.67	3.79	11.72
180	-1.12	5.23	-1.47	2.87	4.96	3.29	11.50
181	-.93	1.40	-.91	3.71	3.58	1.67	5.84
182	-.25	1.80	2.33	3.91	4.17	2.17	7.44
183	-1.46	2.05	-.57	1.94	2.78	1.36	4.13
184	-1.70	2.28	1.06	1.28	2.48	2.09	6.85
185	-5.97	4.79	-6.12	4.15	9.06	5.44	16.04
186	-2.92	2.51	2.68	1.52	4.58	1.59	6.80
187	-2.42	1.94	-4.35	1.41	5.24	1.63	7.26
188	-3.72	3.67	-.08	2.36	5.12	2.15	8.09
189	-3.39	3.29	.81	2.14	4.23	2.96	9.44
190	-.24	2.11	-.97	2.70	2.53	2.34	6.07
191	-2.65	3.92	-5.05	3.20	6.75	3.22	11.56
192	-2.88	2.06	-.66	1.10	3.36	1.56	6.04
193	1.79	5.13	.77	3.05	4.73	3.72	12.49
194	-1.67	2.72	-2.18	3.48	4.31	2.58	8.82
195	-.50	1.55	-.31	1.85	2.18	.81	3.07
196	.47	2.76	-2.43	2.60	3.80	2.17	7.72
197	-3.69	4.12	2.79	6.52	7.98	3.19	12.36
198	-1.45	3.19	4.25	1.63	5.28	1.94	7.10
199	-5.90	4.60	-15.18	11.45	16.55	11.93	35.57
200	.18	2.22	-5.20	8.33	6.86	7.15	19.39
201	.72	2.74	-2.02	4.37	4.70	2.50	8.64
202	-.70	4.22	1.51	4.34	5.61	1.77	7.84
203	-.02	2.67	2.28	3.43	4.22	2.05	7.07
204	5.36	1.12	1.12	1.88	5.75	1.09	7.37
205	-.68	3.57	-1.02	2.20	3.55	2.15	6.60
206	-1.72	2.31	2.75	2.52	3.93	2.44	7.60
207	-1.64	1.75	-4.99	4.90	5.89	4.33	12.21
208	-2.21	3.18	-5.47	3.40	6.21	4.15	12.31
209	-.24	1.31	1.10	2.21	2.42	1.14	3.90
210	1.36	1.53	.67	1.34	2.26	.92	3.70
211	-3.11	2.49	1.90	3.21	4.47	2.96	9.62
212	2.17	1.92	.40	3.56	4.10	1.54	6.45
213	2.61	2.37	.85	2.08	3.72	1.61	6.28
214	1.99	3.01	.07	3.42	4.39	1.69	6.30
215	.11	4.16	2.65	2.16	4.44	2.69	10.00
216	1.40	2.03	1.77	2.00	3.01	1.86	5.07
217	.18	1.92	.79	2.58	2.72	1.58	5.12
218	2.60	2.93	.01	2.12	3.42	2.70	6.46
219	2.63	2.38	2.55	2.13	4.40	1.82	7.20
220	-3.66	2.86	1.57	2.35	4.96	1.86	7.07
221	.21	1.51	.70	2.66	2.57	1.50	5.12
222	-2.64	3.02	1.99	2.76	4.37	2.69	8.81
223	-.26	2.37	2.86	3.05	4.24	1.89	7.13
224	1.00	2.27	-1.79	3.38	3.09	2.27	6.95
225	.27	2.29	2.24	1.31	3.09	1.32	5.01
226	1.49	1.81	-.32	1.70	2.60	.99	4.13
227	.18	.72	1.18	2.60	2.38	1.54	5.26
228	.51	3.42	-.77	4.14	4.83	1.63	6.87
229	.26	2.94	-.01	1.09	2.43	1.74	5.39
230	.44	1.31	-.64	2.12	2.20	1.13	4.04
231	-.85	3.19	-2.40	1.08	3.87	1.19	5.41
232	-.82	2.78	-2.45	2.41	3.44	2.75	8.61
233	.77	1.99	-.85	2.72	2.86	1.83	5.36
234	-.67	1.70	-.54	2.12	2.40	1.22	4.00
235	-.38	2.98	1.33	2.81	3.72	1.72	6.08
236	-.22	1.97	-2.32	4.08	4.49	1.82	6.10
237	-.32	1.49	-.00	1.26	1.62	.93	3.44
238	-.23	1.36	-1.79	1.20	2.28	1.03	4.19

SANTA MONICA 6HR WIND CHANGE 3-9 KM SUMMER

239	.50	2.79	- .37	1.69	- .179	2.76	1.49	4.80
240	.30	2.42	- .75	2.14	.793	2.92	1.11	4.36
241	- .51	1.58	- .79	2.77	2.26	2.77	1.03	4.49
242	- 1.63	2.16	- 6.40	3.20	- .190	7.04	2.84	10.75
243	3.27	4.57	2.43	2.45	.284	5.57	3.16	12.51
244	- 1.79	4.36	.89	5.30	.526	6.12	2.85	10.16
245	- 1.91	4.42	- 1.72	2.84	- .047	5.20	1.95	9.08
246	- 1.62	2.31	- 2.23	3.99	- .207	4.94	1.27	6.33
247	.46	3.16	- .50	1.81	.368	2.89	2.01	6.03
248	3.60	5.10	- 1.79	3.14	- .745	5.54	4.35	11.88
249	- .38	2.46	- .50	1.47	.416	2.35	1.50	5.48
250	.86	1.88	.65	3.44	.075	3.41	1.78	5.62
251	- 1.48	1.47	- 1.61	3.18	.500	3.14	2.52	7.04
252	2.39	1.23	.00	1.85	- .677	2.94	1.21	5.08
253	- 1.43	1.56	- 1.27	1.76	.876	2.59	1.41	4.06
254	.96	1.52	- 3.42	1.46	.066	3.81	1.49	5.48
255	- .77	2.89	1.05	2.19	- .270	3.03	2.09	6.06
256	- .45	2.03	- .21	2.94	- .223	3.12	1.28	5.23
257	- .68	3.11	1.32	2.42	- .552	3.56	1.82	6.44
258	1.11	3.24	1.14	2.04	.200	3.15	2.46	7.10
259	- 1.13	.59	- .80	1.70	- .171	2.03	.81	3.00
260	- 1.76	1.85	- 1.02	1.46	- .427	2.68	1.42	4.33
261	- 2.94	2.93	- .77	1.07	.551	3.62	2.29	6.89
262	.39	3.49	.55	1.58	.535	3.33	1.49	5.96
263	- .13	2.02	.66	3.06	- .044	2.97	1.92	6.46
264	.70	1.13	- 3.24	1.97	- .219	3.54	1.82	5.80
265	2.40	2.45	- 4.85	4.15	- .499	6.08	3.78	11.22
266	.48	2.36	.55	2.56	.217	3.11	1.21	5.02
267	.59	1.37	.94	2.16	- .272	2.20	1.52	4.01
268	- .66	1.57	- 1.78	1.50	- .421	2.53	1.20	4.03
269	- .54	2.51	1.11	4.63	.330	4.71	1.92	6.99
270	- 1.01	1.67	- 1.74	2.08	.260	2.94	1.32	4.98
271	- 1.55	1.53	.63	1.63	- .230	2.37	1.31	3.43
272	- .91	1.56	1.54	1.35	- .553	2.40	1.12	4.40
273	- .96	2.16	2.80	4.09	.275	4.49	2.85	8.61
274	.52	1.25	2.22	4.79	- .027	4.41	2.82	9.85
275	- .67	.75	- .64	2.32	.445	2.07	1.39	4.17
276	- 1.87	2.72	.30	1.08	- .573	2.88	1.75	5.34
277	.42	1.71	- .30	.89	.563	1.51	1.17	3.78
278	.42	2.54	- 1.28	3.39	.477	3.79	1.80	6.85
279	- .25	2.12	- .92	2.91	.225	3.09	1.68	5.68
280	.86	1.93	- .89	1.21	.272	2.31	.87	3.62
281	2.01	4.19	.07	7.00	- .481	6.31	4.98	16.04
282	1.17	3.94	2.71	3.10	- .369	4.50	3.41	9.01
283	- 1.84	2.41	- 3.24	4.25	- .099	5.41	2.44	8.46
284	- 1.06	1.72	4.29	2.89	- .160	4.91	2.45	8.93
285	- .11	1.05	- .19	1.69	.494	1.66	.88	3.17
286	1.05	3.71	.08	2.28	- .231	3.55	2.37	7.78
287	- 1.19	3.34	- .61	3.18	- .276	3.92	2.33	8.65
288	- .11	1.73	.99	1.45	.239	2.11	1.02	3.20
289	- 2.55	2.68	.51	1.51	.289	3.10	2.48	6.47
290	- 3.12	2.63	- 1.14	2.50	.829	3.92	2.84	8.89
291	.30	4.28	- 4.10	2.46	- .155	5.54	2.88	9.50
292	3.28	5.30	.90	2.58	.686	4.64	4.81	14.17
293	- 2.20	2.13	- .05	3.26	- .622	3.73	2.14	6.89
294	- .68	1.88	.52	3.87	.450	3.55	2.16	6.65
295	- 1.85	2.58	- .40	1.80	- .648	3.06	1.78	5.66
296	2.97	1.88	.74	1.93	- .572	3.55	1.88	6.51
297	.08	3.56	- .65	1.32	.081	3.22	1.68	6.35
298	- .29	2.28	- .18	1.21	.352	2.33	.68	3.26

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299	-1.68	1.70	1.60	1.71	-265	3.05	1.11	4.74
300	2.26	1.80	-1.23	1.20	-246	2.82	1.77	5.02
301	-96	2.81	.53	1.72	-292	2.49	2.24	7.17
302	1.25	3.95	1.25	3.05	.689	3.65	3.61	11.53
303	.83	1.68	.76	1.91	-.072	2.40	1.11	4.32
304	1.28	1.65	.46	1.54	.388	2.42	.63	3.39
305	1.15	2.97	-.06	1.83	.083	2.95	1.90	5.87
306	.29	3.28	-.51	1.51	-.641	2.81	2.06	6.45
307	-.66	2.84	-.89	3.53	-.042	4.15	1.36	6.10
308	-.11	.74	.53	2.91	-.582	2.69	.96	3.71
309	1.30	2.25	-2.66	2.52	-.784	3.80	2.19	6.43
310	.75	3.98	-1.36	1.90	-.752	4.05	1.77	6.89
311	-1.68	3.03	.13	3.64	.204	4.42	1.73	6.59
312	-1.44	1.54	-.54	3.19	-.221	3.35	1.49	5.12
313	-.06	3.14	-1.67	2.82	.201	3.77	2.14	7.65
314	-.70	4.02	-1.56	3.39	-.323	4.62	2.47	8.01
315	.21	1.40	.06	1.53	.604	1.74	.92	3.11
316	2.15	2.28	1.51	2.17	-.786	3.74	1.27	5.43
317	-1.13	1.03	-.22	1.76	-.265	2.00	1.03	3.05
318	-.12	2.29	.09	1.37	-.444	2.27	1.06	3.96
319	-.36	2.70	-.60	1.25	-.981	2.54	1.38	5.09
320	-.76	4.31	-.96	1.21	.277	4.22	1.02	5.98
321	-.76	2.06	2.07	4.02	.138	4.07	2.60	7.72
322	-.78	2.96	.27	2.45	-.067	3.59	.71	4.62
323	-.63	1.51	-.48	2.57	.551	2.46	1.60	4.81
324	-.08	1.70	.42	1.46	-.707	1.94	.93	3.68
325	-.04	2.45	-.19	1.55	.133	2.49	1.10	4.56
326	-.57	1.88	.04	1.60	-.740	2.05	1.26	3.69
327	-.79	2.37	-1.10	2.64	-.168	3.48	.78	4.51
328	2.70	3.68	.76	2.73	.844	4.63	2.27	7.62
329	-.83	2.10	1.27	2.85	-.509	3.51	.93	4.84
330	-.30	2.73	1.75	1.30	-.343	2.85	.66	3.75
331	-1.25	2.52	1.04	1.43	-.588	2.69	1.74	4.85
332	-.93	1.59	.85	2.07	.038	2.56	1.00	3.91
333	-.02	1.71	-1.38	2.74	.707	2.48	2.34	6.98
334	-1.26	3.26	-2.55	2.26	-.318	4.14	2.28	7.89
335	-.05	2.20	.56	1.95	.460	2.30	1.68	5.03
336	-2.44	3.19	-1.70	2.18	.853	3.75	2.98	9.19
337	-1.75	1.37	-.42	2.82	-.109	3.22	1.22	4.23
338	-.16	3.16	.56	2.11	-.740	3.04	2.01	5.94
339	-2.36	2.97	-.35	3.61	-.137	4.55	2.09	6.90
340	.43	2.26	-.02	2.37	-.435	2.82	1.28	5.46
341	-2.56	3.11	1.63	3.18	-.032	4.46	2.70	8.04
342	1.62	2.32	-2.26	2.78	-.179	3.68	2.51	8.09
343	-.68	2.38	-1.87	3.16	-.726	4.06	1.02	5.25
344	.15	2.60	-.62	1.86	-.597	2.80	1.26	4.13
345	1.58	2.78	2.21	3.17	-.275	4.31	2.17	6.97
346	2.16	1.85	-.21	2.13	.016	3.02	1.68	5.13
347	-1.19	2.32	-.24	2.73	-.194	3.39	1.08	5.59
348	-.25	1.71	2.70	2.48	-.538	3.43	1.96	7.55
349	1.15	2.66	-.69	1.45	-.349	2.89	1.22	5.04
350	3.07	4.17	.88	4.03	-.810	5.21	3.73	12.34
351	-.92	1.51	.20	3.43	-.542	2.99	2.15	6.15
352	-1.04	1.62	.86	2.68	.251	2.96	1.29	5.00
353	-1.51	1.27	-.98	2.07	.338	2.58	1.38	3.89
354	-2.04	3.88	-.87	2.05	.129	4.31	1.80	7.04
355	1.02	2.17	.40	3.67	-.163	3.90	1.35	5.71
356	-.62	2.35	1.04	1.67	-.758	2.78	1.02	4.29
357	-1.30	2.63	-2.10	2.25	-.181	3.52	2.15	6.24
358	1.24	4.87	-.06	3.00	-.062	4.95	2.44	7.62

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359	.38	1.53	-1.33	3.61	-1.025	3.39	1.49	5.87
360	-.31	2.30	-2.44	3.06	-.385	3.49	2.74	8.63
361	.73	1.12	1.82	2.64	-.089	3.12	1.15	4.50
362	3.69	2.89	-.05	2.66	-.112	4.62	2.53	7.63
363	-1.83	3.30	.12	1.99	-.489	3.12	2.72	8.92
364	-3.96	3.49	2.06	1.97	-.565	4.81	3.50	12.12
365	-.72	1.43	-.14	2.45	-.869	2.32	1.55	4.93
366	1.23	2.30	1.65	1.50	-.106	3.16	.89	4.93
367	.42	1.98	.10	1.61	-.464	2.09	1.28	3.62
368	-.94	3.29	-3.23	1.30	-.058	4.49	1.49	6.30
369	1.11	1.72	-.21	1.65	-.431	1.93	1.21	3.37
370	.33	1.77	-1.49	4.79	-.876	4.58	2.03	7.38
371	-1.53	3.03	.87	2.04	-.529	3.18	2.28	5.77
372	-.28	1.21	1.15	3.11	-.830	2.69	2.07	6.48
373	-2.02	2.45	-.02	2.32	-.074	3.42	1.57	6.03
374	-.58	1.67	-.65	1.74	-.146	2.24	.93	3.37
375	-3.28	1.23	-3.91	2.02	-.714	5.18	2.19	8.63
376	-3.64	2.04	-2.16	2.91	-.686	4.64	2.89	10.66
377	1.05	2.07	1.89	4.11	-.329	4.28	2.30	7.82
378	1.82	1.45	1.88	1.95	-.260	3.27	1.19	5.16
379	.25	1.78	-1.25	3.30	-.244	3.43	1.49	5.76
380	.33	3.07	-.97	3.70	-.222	4.02	2.33	8.05
381	.73	1.00	2.34	2.38	-.030	2.69	2.28	6.77
382	2.54	3.07	2.31	1.65	-.083	4.54	1.38	5.55
383	.15	1.22	2.58	2.38	-.394	3.23	1.66	6.08
384	-.05	1.73	2.56	1.84	-.075	3.17	1.51	5.95
385	-1.93	1.38	1.93	1.58	-.039	2.97	1.68	4.56
386	-.95	1.62	1.01	2.12	-.484	2.61	1.18	4.71
387	-1.02	1.08	-2.31	2.66	-.243	3.09	2.15	6.23
388	-.63	1.28	-.20	2.20	-.226	2.22	1.11	3.89
389	.01	3.42	-1.16	4.07	-.252	4.68	2.07	8.22
390	1.28	2.61	-3.68	2.49	-.730	4.81	1.93	8.23
391	.46	1.38	.37	2.45	-.063	2.57	.78	3.44
392	2.05	2.26	-.31	2.90	-.440	3.58	1.89	5.92
393	-.27	1.20	1.01	3.56	-.308	2.79	2.51	8.20
394	.08	2.92	-1.08	.62	-.313	2.67	1.40	4.62
395	.32	1.52	-.24	1.93	-.347	2.28	.43	2.97
396	2.13	1.85	2.02	1.86	-.366	3.39	1.87	7.12
397	-3.41	3.81	1.12	2.21	-.291	4.40	3.43	11.21
398	.57	2.23	.65	2.46	-.704	2.70	1.85	5.99
399	2.49	2.68	4.25	1.91	-.737	5.75	.73	6.76
400	1.59	4.43	-.70	3.26	-.618	4.45	3.28	9.29
401	-.20	2.15	1.82	1.94	-.457	2.95	1.46	4.81
402	.40	2.74	.28	2.67	-.042	3.37	1.30	4.79
403	-1.79	1.74	1.21	1.79	-.132	2.83	1.54	4.44
404	-.04	1.37	1.66	2.04	-.330	2.51	1.38	4.35
405	.44	2.96	-.35	1.89	-.552	3.08	1.30	5.66
406	1.09	2.06	-.58	3.88	-.125	3.88	1.87	6.71
407	.05	3.20	.61	3.06	-.458	3.62	2.19	7.11
408	1.87	3.11	1.67	1.96	-.772	3.48	2.59	7.24
409	-.65	1.37	-.46	2.92	-.195	2.83	1.35	5.15
410	-1.98	2.64	1.37	2.06	-.468	3.44	2.04	6.78
411	-.97	1.01	-.96	1.43	-.496	1.77	1.26	3.24
412	.28	3.36	.14	1.13	-.503	2.77	1.93	6.40
413	-1.89	1.80	-.24	1.35	-.243	2.48	1.45	5.18
414	-1.40	1.17	-.44	2.05	-.327	2.48	.93	3.61
415	-.15	.82	.88	2.40	-.031	1.90	1.78	4.85
416	1.30	2.45	-.04	1.20	-.143	2.65	1.10	4.01
417	-.46	3.60	-.55	2.13	-.146	3.67	1.53	5.46
418	.88	.58	-.34	3.15	-.347	2.77	1.53	4.63

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419	- .99	1.18	3.21	.475	2.96	1.62	5.91
420	- .75	2.25	1.38	- .102	2.41	.92	4.06
421	- .53	2.77	2.67	.304	3.78	1.52	6.06
422	- 1.29	1.84	1.33	.441	2.58	.92	3.61
423	- 1.15	1.58	1.51	-.521	2.27	.72	3.04
424	- .67	2.28	2.12	-.869	2.64	1.78	5.22
425	- 2.13	2.33	3.71	-.623	4.53	.94	5.41
426	- 1.45	1.93	1.30	-.130	2.27	1.72	5.84
427	- 1.69	1.44	1.83	.419	2.44	1.38	5.02
428	- .17	1.51	2.67	.408	2.41	1.64	5.49
429	- .46	2.65	1.89	-.531	3.01	.99	4.85
430	.76	2.31	2.04	.333	2.21	1.93	4.85
431	- 1.88	2.92	2.18	-.191	3.24	1.26	4.84
432	1.50	3.48	3.75	-.355	4.99	3.21	9.08
433	.34	3.35	4.11	-.377	4.04	2.22	7.21
434	.71	2.68	2.16	.138	3.19	1.75	6.05
435	- 1.57	2.09	3.90	.089	4.77	2.45	8.04
436	- 1.27	1.18	3.37	.470	3.53	1.47	6.43
437	- .48	3.70	2.26	.223	3.62	2.00	6.05
438	.18	1.85	2.26	-.41	3.57	1.62	6.22
439	.52	1.66	2.16	-.307	2.03	1.40	4.01
440	- .59	1.66	4.07	.239	3.70	1.97	6.09
441	1.29	2.68	2.26	.422	3.71	2.26	8.21
442	.33	1.48	3.32	-.177	3.14	1.99	6.98
443	- 1.78	2.01	2.89	.607	3.14	1.66	6.19
444	.75	2.01	2.44	-.024	4.26	1.88	4.80
445	1.57	1.30	2.81	-.393	3.12	2.01	8.07
446	.44	2.06	2.86	.605	3.33	1.37	4.58
447	-.29	2.29	2.86	-.561	3.33	2.32	7.67
448	3.51	1.80	3.53	-.394	4.33	1.90	7.81
449	1.12	2.04	2.57	-.033	2.84	1.38	5.00
450	-.79	2.25	2.11	-.357	2.58	1.30	5.16
451	2.20	10.77	1.34	.011	6.62	8.71	25.83
452	- 2.01	3.37	1.59	.162	4.39	1.44	6.65
453	1.42	2.57	2.69	.301	3.16	1.89	6.63
454	- .70	1.48	2.18	.76	3.16	.76	2.63
455	- .13	1.76	2.00	.310	2.76	1.41	5.08
456	- .16	1.76	3.37	.219	3.14	1.83	6.27
457	- 2.38	2.43	2.72	.738	3.67	2.28	7.23
458	-.02	2.39	1.61	-.762	3.16	1.30	5.62
459	.76	1.91	2.84	-.765	3.08	1.13	5.32
460	1.74	2.87	2.03	-.348	3.13	2.15	5.79
461	- 4.69	6.67	7.31	-.882	8.59	6.99	21.86
462	.76	5.28	1.44	-.598	4.65	2.38	9.02
463	- 1.41	2.04	2.14	.782	3.12	2.37	7.23
464	- 1.78	2.31	2.20	-.142	3.97	1.87	5.47
465	1.82	2.88	2.70	.791	3.40	1.54	6.99
466	-.07	2.43	2.60	-.314	3.33	1.68	5.27
467	3.26	1.89	3.93	.407	9.01	2.79	9.96
468	- 7.34	5.68	2.54	.623	3.84	5.69	18.97
469	1.26	2.81	2.30	-.364	4.39	2.50	6.98
470	- .73	4.31	1.64	-.434	2.83	1.77	7.82
471	.55	3.17	1.42	.434	2.65	1.50	5.93
472	- 1.04	1.35	1.52	.295	2.57	1.81	4.62
473	- 1.48	1.42	2.03	-.222	1.73	1.43	6.30
474	-.21	1.67	1.10	-.361	2.57	1.81	4.35
475	.77	2.88	2.55	-.414	3.56	2.02	6.39
476	3.87	2.35	3.93	.207	5.10	2.87	8.10
477	- 2.58	2.95	1.28	-.131	4.40	1.67	7.26
478	-.11	2.53	3.88	.029	3.91	2.07	6.63

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479	-.03	1.44	2.64	2.03	-1.448	2.97	2.00	5.01
480	.74	1.84	1.25	2.24	-.230	2.96	.81	3.98
481	-1.47	1.82	1.47	2.59	-.252	3.07	2.02	5.61
482	2.38	2.71	2.26	1.57	.198	3.84	2.28	6.60
483	-2.59	1.95	.76	1.74	1.643	3.32	1.57	5.45
484	.86	2.09	-1.74	2.02	-.159	2.61	1.43	4.69
485	-1.12	3.06	1.19	1.99	.510	3.16	1.83	6.67
486	-.36	2.11	.86	1.78	-.237	2.67	.58	3.52
487	2.34	2.44	.52	1.70	.151	3.26	1.79	5.39
488	.72	2.72	-2.06	2.52	-.242	3.56	2.12	6.02
489	-.02	2.71	.08	2.53	.135	3.20	1.36	4.82
490	1.60	2.02	.47	2.56	-.192	3.22	1.34	4.94
491	-.47	2.16	3.75	3.01	.197	4.82	1.80	8.12
492	1.74	5.09	2.64	2.92	-.329	5.43	3.42	12.03
493	.56	.82	.08	2.20	-.308	1.93	1.24	3.54
494	1.50	2.30	1.85	1.63	-.163	3.43	.91	5.12
495	3.63	4.42	-7.26	5.38	-.924	8.41	6.54	19.33
496	-1.80	2.95	-.19	2.39	-.745	3.67	1.58	6.00
497	1.25	1.49	-.96	2.04	.677	2.68	.96	4.22
498	-.91	3.61	-.67	1.12	-.620	3.54	1.08	5.05
499	-1.17	2.21	-.91	3.59	-.092	3.65	2.19	7.09
500	.78	4.06	2.09	3.04	.683	4.85	2.01	8.10
501	.11	2.87	.70	1.80	.374	2.91	1.48	4.91
502	-.64	3.64	1.87	5.58	.435	5.65	3.42	11.95
503	-.69	4.01	-.24	.92	-.827	3.26	2.28	6.30
504	.25	2.28	-2.29	2.20	.165	3.25	1.97	6.47
505	-.53	2.80	-1.26	1.88	-.137	3.28	1.00	4.73
506	1.40	2.06	-1.99	2.74	-.573	3.76	1.46	5.57
507	2.19	5.15	-.45	2.54	-.154	5.39	2.23	8.40
508	1.77	4.57	-.58	3.13	.849	4.13	3.85	11.68
509	-.09	1.64	1.11	3.74	-.574	3.49	1.98	6.02
510	-.97	1.61	.02	2.46	-.095	2.77	.92	3.68
511	-.51	2.31	-.44	.96	-.397	2.24	.97	3.35
512	1.04	1.53	-1.45	1.91	-.192	2.45	1.65	5.40
513	-1.04	1.60	-2.07	1.39	.044	2.80	1.27	4.50
514	-.89	2.95	-1.76	4.71	-.417	4.57	3.32	11.61
515	-1.49	3.02	.12	2.70	-.398	3.64	1.90	6.19
516	.47	4.23	1.58	1.74	.142	4.26	1.71	6.68
517	-.13	1.11	-.23	1.29	.508	1.36	.90	3.04
518	1.86	2.51	-1.17	3.07	-.332	3.83	2.07	7.33
519	-.96	1.19	1.08	2.14	-.396	2.43	1.25	4.70
520	2.06	2.27	.92	1.20	.278	2.78	1.86	5.66
521	-.06	2.33	.76	1.45	.019	2.43	1.16	4.13
522	.40	2.85	2.15	2.58	.805	3.81	1.83	6.67
523	-.89	2.45	-.68	2.07	-.037	2.30	2.36	5.86
524	-1.78	4.00	2.84	1.25	.104	4.44	2.77	10.00
525	-1.05	1.99	-.95	2.43	-.601	3.00	1.31	4.73
526	3.98	3.83	1.70	5.37	-.251	6.77	3.46	10.36
527	-.57	2.16	1.06	2.90	-.269	3.36	1.29	5.17
528	.45	1.75	-.22	3.12	.371	3.05	1.48	5.00
529	2.53	3.65	-1.28	3.87	.778	5.19	2.51	8.78
530	-2.35	3.14	-4.33	2.46	.061	5.71	2.50	8.97
531	-1.52	1.58	1.00	1.80	.060	2.81	.65	3.94
532	-1.08	3.41	-.52	2.80	-.331	3.92	1.78	5.73
533	-1.91	1.29	1.13	3.13	-.211	3.71	1.04	5.05
534	.51	2.48	3.99	3.70	-.356	5.07	2.97	8.64
535	-2.94	1.59	3.64	2.99	.134	5.18	2.39	8.07
536	2.48	2.58	.75	1.66	-.233	3.79	.69	5.20
537	-3.65	2.47	-2.43	2.44	-.501	5.21	1.71	7.12
538	-.58	2.49	1.44	5.26	-.695	4.73	3.25	9.06

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539	-2.04	3.38	.61	3.92	-573	4.84	2.63	9.20
540	3.58	3.68	-2.18	4.24	-512	6.28	2.44	8.79
541	.85	2.14	.75	1.79	-514	2.32	1.73	5.05
542	3.11	4.75	2.61	2.96	.402	5.23	4.32	14.04
543	-1.74	1.29	1.49	.85	.313	2.55	.96	3.48
544	.06	1.13	1.23	2.19	.017	2.14	1.56	4.95
545	-2.36	2.00	1.02	2.77	-826	3.25	2.65	8.85
546	-7.71	1.88	-1.32	4.49	.325	4.35	2.06	7.16
547	-3.28	2.50	.47	1.55	-282	3.65	2.44	6.36
548	.52	1.99	-55	1.82	.606	2.37	1.18	4.25
549	.00	1.95	-2.17	1.78	-459	2.96	1.50	5.67
550	.19	2.19	-.36	2.72	-622	2.82	1.76	5.03
551	-4.91	4.93	.58	2.92	-544	5.15	4.67	14.75
552	-2.30	1.38	3.06	4.50	.578	5.82	4.67	9.28
553	2.84	1.27	-.83	1.53	-251	3.28	1.29	4.73
554	2.57	1.59	-.09	1.33	-417	2.92	1.44	5.20
555	-1.81	4.15	-47	2.04	-.072	4.09	2.44	8.10
556	-.49	3.81	-4.05	2.44	.713	5.67	1.55	8.75
557	-.08	1.77	-.48	1.36	-.052	1.93	.96	3.02
558	.17	2.24	.34	2.92	.307	3.26	1.15	5.40
559	1.08	2.47	.56	4.46	-.545	4.66	1.54	7.25
560	3.06	5.27	.10	1.93	-.108	5.13	3.42	9.83
561	-2.73	4.72	-1.63	2.85	.949	5.33	3.02	9.23
562	-2.15	2.00	.70	1.63	-.047	2.82	1.81	5.84
563	1.95	3.81	1.45	4.29	-.783	5.38	2.45	9.46
564	1.93	2.48	2.76	2.71	.611	4.30	2.29	7.02
565	.06	1.84	-.22	1.30	-.319	1.93	.88	3.39
566	-.57	.46	.91	1.34	-.247	1.46	.95	2.88
567	2.13	1.96	.18	3.74	-.477	3.79	2.52	7.99
568	.81	2.57	-5.47	3.49	.029	5.98	3.57	10.85
569	-1.35	1.93	1.99	3.73	-.336	4.28	1.73	7.27
570	-.66	2.06	.86	3.03	-.093	3.03	2.01	6.74
571	.84	1.22	3.06	1.71	.684	3.29	1.87	6.31
572	2.35	1.74	.53	1.50	-.580	3.08	.97	3.98
573	-1.58	1.26	-.59	1.38	.147	2.03	1.41	4.00
574	.60	1.83	1.05	1.54	.076	2.41	.81	3.41
575	-2.06	3.43	1.51	2.40	-.650	4.10	2.35	6.78
576	2.79	4.79	-2.30	2.83	-.372	5.05	4.06	13.42
577	-.96	3.28	-2.01	3.40	.389	4.53	2.04	6.74
578	.19	2.43	.43	4.48	-.022	4.40	1.90	8.33
579	-1.27	1.44	-2.25	1.41	.489	2.97	1.24	4.61
580	.32	2.42	-1.10	2.38	-.594	3.00	1.59	5.93
581	-1.58	2.05	-.40	2.87	-.111	3.45	1.29	5.43
582	-3.33	3.54	.10	3.65	.416	5.32	2.40	9.33
583	-2.23	2.12	-1.72	2.43	.022	3.75	1.79	6.42
584	-1.59	1.42	-1.36	1.32	-.124	2.41	1.46	3.90
585	1.49	1.31	.57	1.89	.113	2.40	1.24	4.14
586	1.55	2.26	-.91	3.73	-.634	4.22	1.43	6.94
587	.80	1.57	.58	1.16	.389	1.90	.88	3.01
588	.73	1.97	-1.12	1.15	.067	2.26	1.15	3.54
589	-1.56	3.48	-2.04	5.46	.771	5.26	4.16	11.32
590	-.15	3.55	.79	4.80	.917	4.59	3.43	11.03
591	-.07	2.08	-1.69	3.74	.113	3.56	2.62	9.00
592	-1.15	1.92	-.63	2.13	-.657	2.64	1.45	5.08
593	-.06	1.71	.93	2.32	-.331	2.49	1.44	5.06
594	-.37	1.22	1.76	1.72	.090	2.31	1.41	4.28
595	-1.49	3.08	.97	2.51	.469	3.77	1.71	6.33
596	-.22	2.95	-.59	2.06	.640	2.88	1.92	5.24
597	-.19	1.40	.13	2.14	.752	2.30	.66	3.05
598	.30	3.97	-1.19	2.93	-.094	4.47	1.73	7.56

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599	-1.95	.99	.98	2.92	3.39	1.29	5.24
600	-1.64	1.63	-.90	1.18	1.97	.97	3.32
601	-1.03	2.67	-.08	2.84	3.67	.87	4.95
602	-.33	1.31	1.75	1.20	2.21	1.06	4.02
603	-.13	1.29	-.79	2.70	2.52	1.52	5.76
604	1.53	4.01	.67	3.53	4.51	2.85	10.17
605	1.08	2.67	.68	2.34	3.26	1.45	6.06
606	.50	1.99	-.58	3.27	3.42	1.33	5.36
607	-.44	3.49	.92	2.31	3.78	1.42	5.31
608	1.86	1.55	-.14	2.42	3.19	1.39	5.01
609	.02	2.37	-.77	1.40	2.41	1.22	4.24
610	.80	2.56	-.16	2.74	3.16	1.79	4.98
611	.71	1.41	-.43	2.14	2.24	1.25	3.91
612	.53	1.79	-.83	2.45	2.62	1.52	4.65
613	-1.38	2.31	-.98	1.81	2.96	1.30	5.02
614	.93	1.08	.10	1.66	1.92	.80	3.07
615	-.32	3.70	-3.08	2.43	4.80	1.98	8.04
616	-3.98	3.22	-1.21	2.62	4.93	3.02	11.07
617	.53	1.46	-.80	2.11	2.12	1.55	5.00
618	-.25	1.24	-.85	2.04	2.12	1.17	3.48
619	-.91	1.29	-.20	1.63	1.86	1.13	3.07
620	.12	1.38	-1.78	2.94	3.22	1.47	5.72
621	-.33	2.16	1.11	1.23	2.88	1.57	4.97
622	3.84	1.26	.78	2.76	4.27	.72	5.30
623	-4.43	1.97	2.21	3.70	4.95	2.57	9.14
624	-2.36	2.18	.07	2.76	2.90	2.12	7.48
625	.40	1.86	-.07	5.62	2.90	1.22	5.05
626	-.71	1.86	.87	5.62	4.30	3.88	9.85
627	-1.94	2.04	-.35	1.82	3.09	.94	4.46
628	1.68	2.51	-.29	1.12	2.54	1.85	5.84
629	2.05	3.21	1.17	1.75	3.62	2.14	6.65
630	.17	2.27	-.59	2.42	2.67	1.77	4.93
631	-1.59	1.76	.25	1.90	2.50	1.56	4.96
632	.81	1.79	2.45	2.13	3.24	1.79	4.99
633	-.37	1.09	1.12	1.59	1.81	1.23	4.24
634	-.02	1.71	-.85	6.25	5.15	3.44	12.41
635	-.94	1.04	-.47	1.94	5.25	3.08	3.08
636	-.12	1.06	-.98	2.82	2.30	2.25	6.17
637	-2.23	1.08	.34	2.19	3.05	2.02	6.17
638	-1.20	2.22	1.75	1.75	2.93	1.01	4.19
639	4.64	3.05	6.96	3.36	2.93	1.81	6.15
640	5.96	4.30	-9.48	5.67	11.65	3.25	13.09
641	-.97	1.91	.79	1.39	1.65	6.21	21.36
642	.51	2.13	.58	1.23	2.23	1.26	4.21
643	.70	2.30	1.65	1.22	2.32	.69	2.93
644	3.41	2.30	1.70	2.71	2.91	.80	3.94
645	-1.50	2.29	-.13	2.42	4.51	2.43	7.72
646	1.11	2.35	2.91	2.83	3.24	1.22	5.01
647	-.92	5.45	.85	4.15	4.14	2.20	7.78
648	2.59	2.45	-1.29	4.02	5.67	3.35	9.87
649	.39	2.33	-2.67	2.46	5.12	1.19	6.85
650	.94	2.20	.37	2.00	5.12	2.11	6.16
651	-.73	2.69	2.50	1.79	3.64	1.52	4.38
652	.93	2.95	.99	2.43	2.57	1.73	5.13
653	-1.99	1.97	1.33	2.32	3.63	1.72	6.23
654	-2.19	.86	.90	2.47	3.44	1.25	5.61
655	-.57	2.12	-2.10	1.72	3.21	1.14	4.79
656	-1.01	1.39	-2.64	1.39	3.04	1.47	5.24
657	-3.46	3.04	1.30	3.50	3.23	1.50	5.89
658	-1.17	1.60	.26	1.59	5.06	2.73	8.59
					2.30	.75	3.03

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659	1.68	3.12	.72	2.91	.173	3.72	2.44	8.48
660	-1.24	2.38	-.70	2.68	-.750	3.34	1.61	5.81
661	.43	4.75	-.99	2.72	-.714	4.92	1.65	6.38
662	-1.88	4.76	.71	.81	-.360	4.37	2.38	8.26
663	-.03	1.47	1.05	2.04	-.816	2.09	1.57	5.00
664	.38	1.27	2.18	1.70	-.624	2.59	1.54	4.54
665	1.60	2.47	.14	3.80	.013	4.08	2.04	7.68
666	2.90	2.76	2.49	1.47	-.289	4.46	1.91	7.83
667	-1.86	2.01	-.29	1.81	.427	2.89	1.30	5.20
668	-2.43	3.47	-.38	3.40	.612	2.89	2.83	10.04
669	-.10	1.81	3.34	2.29	.642	3.77	2.23	8.68
670	-.34	2.22	1.08	1.16	.055	2.19	1.46	4.66
671	-2.22	1.21	-.15	2.60	.210	3.27	1.22	5.21
672	-.17	1.13	.40	2.06	.266	2.02	.99	3.41
673	2.11	2.66	1.38	2.56	-.489	3.79	2.06	6.13
674	-.85	1.91	1.60	3.26	-.433	3.57	1.81	6.19
675	-.67	1.49	-2.11	2.95	-.319	3.36	1.86	5.36
676	-2.33	3.35	-1.70	4.00	-.014	5.33	1.93	8.43
677	-.40	1.88	1.30	2.25	-.574	2.85	1.15	5.19
678	.95	1.72	2.37	1.75	-.686	3.24	1.17	4.35
679	2.54	1.12	-1.16	3.03	.386	3.92	1.27	5.74
680	8.91	4.62	-5.36	12.78	-.941	13.83	9.36	30.51
681	.71	2.70	1.87	2.06	.473	3.23	2.00	6.27
682	-2.30	1.68	-.37	1.59	-.446	2.93	1.29	5.44
683	.19	2.16	-.34	2.80	.479	3.17	.95	4.23
684	-.32	2.36	-.15	1.70	-.097	2.35	1.47	4.31
685	.50	1.85	1.30	3.64	-.785	3.72	1.12	5.31
686	.42	2.33	.87	3.44	.305	3.99	.93	5.10
687	7.29	4.67	-3.83	2.82	.089	7.97	4.32	14.49
688	-5.54	5.16	-3.83	2.11	.090	7.24	4.78	15.09
689	.58	1.92	1.94	2.61	-.225	3.26	1.70	5.76
690	2.37	2.94	.25	1.55	-.013	3.47	1.90	5.88
691	1.21	1.55	.15	2.09	.083	2.61	.73	3.39
692	1.95	2.49	-4.12	4.37	-.255	5.76	3.29	8.99
693	.00	3.53	-1.26	2.09	.021	3.65	1.77	6.39
694	.20	2.26	.28	4.58	.521	4.51	1.59	7.56
695	1.65	3.35	-.01	1.63	-.070	3.37	1.94	6.18
696	2.61	3.97	-.74	2.94	-.317	4.64	2.82	9.49
697	.34	1.94	1.05	2.47	-.522	2.87	1.27	5.05
698	2.90	3.28	1.20	2.43	.856	3.95	3.16	9.50
699	.13	2.88	1.99	1.37	.653	3.26	1.57	6.04
700	4.72	5.82	-4.33	1.55	-.641	7.15	4.96	16.21
701	1.52	2.90	4.65	3.72	-.299	5.74	3.43	11.12
702	6.27	2.60	-.91	3.93	.181	7.26	2.74	10.80
703	-1.22	2.62	-.27	3.89	-.452	4.14	1.97	6.54
704	5.06	2.87	1.61	2.35	.186	5.68	3.00	10.01
705	2.87	3.07	1.45	2.46	-.104	4.40	2.23	8.23
706	.25	2.69	-.05	1.91	-.466	2.66	1.64	5.47
707	.44	1.94	-.92	1.88	-.842	2.45	1.24	4.22
708	2.03	2.07	-.83	1.47	-.295	2.72	1.85	5.47
709	-2.04	2.42	3.86	1.96	-.248	4.92	1.92	6.95
710	-.78	1.95	3.54	4.12	-.270	4.94	2.78	9.27
711	.42	3.46	-.02	4.36	-.454	4.51	2.73	7.82
712	5.17	4.63	-1.53	5.40	.308	7.71	3.90	15.54
713	2.95	2.37	1.41	1.70	.045	3.76	2.12	7.28
714	1.99	1.35	-1.47	1.84	-.745	2.85	1.70	4.95
715	-1.16	4.35	2.01	.71	-.353	4.08	2.51	8.58
716	1.68	3.58	.44	1.45	-.695	3.51	2.03	7.13
717	.42	1.26	2.60	3.58	-.859	3.90	2.17	7.11
718	.41	2.23	2.30	1.30	.895	3.24	.90	4.42

SANTA MONICA 6HR WIND CHANGE 3-9 KM SUMMER

719	- .95	2.91	1.93	1.55	- .354	3.37	1.74	5.86
720	1.18	1.66	- .37	2.41	- .122	2.60	1.58	5.75
721	.02	2.21	.19	2.46	.401	2.59	1.78	5.15
722	4.36	1.48	2.46	3.13	- .179	5.78	1.52	7.48
723	1.30	3.21	4.31	3.01	.748	5.48	2.82	9.83
724	2.87	2.07	-3.24	3.88	.255	5.50	2.44	9.86
725	-1.86	1.60	-1.99	4.05	- .795	4.43	2.18	8.44
726	.24	5.95	-4.70	2.68	.715	7.20	2.83	11.41
727	1.19	1.66	2.36	2.55	.374	3.50	1.76	6.36
728	2.25	1.68	-.60	1.60	.257	2.91	1.36	5.22
729	2.34	2.52	-.95	2.22	.290	3.33	2.41	7.21
730	1.53	1.68	-1.22	1.73	.350	2.79	1.08	4.06
731	-6.18	1.69	-9.69	4.48	.366	11.69	4.18	17.40
732	-5.20	3.91	1.98	5.41	.558	7.52	3.83	11.64
733	-1.82	1.42	-1.45	2.66	.383	3.48	1.14	5.06
734	2.33	3.15	-.59	4.99	.135	5.37	2.80	9.70
735	-2.43	3.91	.12	2.03	.811	4.33	2.11	7.83
736	.04	1.93	.42	1.55	-.057	2.12	1.03	3.44
737	-.75	1.86	-.18	2.16	.421	2.43	1.40	4.31
738	-1.88	3.09	.07	1.91	-.136	3.29	2.16	7.01
739	-.38	1.83	.49	1.82	-.707	2.23	1.13	3.65
740	-.36	3.06	1.24	2.31	.273	3.37	1.85	6.38
741	1.11	1.73	-.32	2.49	-.115	2.79	1.29	4.44
742	1.28	2.36	1.77	2.16	-.060	3.33	1.68	5.81
743	-2.30	2.02	2.46	2.62	-.104	4.03	2.29	7.44
744	-.25	2.32	-1.92	2.04	.668	3.25	1.26	5.32
745	-1.65	2.94	-.13	3.40	.721	4.15	1.83	7.92
746	1.68	3.03	.81	2.74	.062	3.82	1.93	6.67
747	7.64	2.80	-2.98	5.80	-.721	9.49	3.84	13.78
748	1.61	1.87	-2.35	2.90	-.547	3.50	2.67	8.50
749	8.68	5.38	-8.11	10.19	-.504	13.12	9.82	28.29
750	-12.44	8.85	1.57	8.65	-.415	14.77	9.06	29.12
751	.62	1.42	-.39	2.64	.010	2.65	1.20	4.20
752	-2.45	5.46	-3.21	1.90	-.263	6.44	2.02	10.31
753	-1.62	1.30	1.49	2.13	.290	3.12	.73	4.03
754	-1.22	.91	-.09	1.76	.827	1.82	1.35	4.43
755	-.04	2.48	1.33	4.07	.194	4.14	2.19	7.73
756	-1.18	3.03	-.73	5.43	.843	4.88	3.62	11.14
757	3.07	4.09	-1.14	3.18	-.210	5.06	3.06	11.11
758	2.50	2.34	-.93	2.46	.680	3.93	1.36	5.01
759	.70	7.56	-2.90	6.11	.429	8.93	3.45	15.75
760	.38	1.91	7.98	5.46	.579	8.13	5.56	16.48
761	-2.86	2.27	-1.72	5.58	.242	5.70	3.37	11.25
762	2.72	4.25	.99	5.39	.481	6.29	3.27	11.80
763	-1.59	1.77	-1.38	1.68	-.310	2.97	.92	4.14
764	.13	1.50	-1.32	1.21	-.034	2.11	.76	3.13
765	.25	1.99	.00	1.76	.605	2.18	1.26	4.63
766	.24	3.24	.51	.92	-.385	2.76	1.68	5.62
767	-.33	3.82	-.04	2.71	-.147	3.73	2.42	6.54
768	.72	3.01	-.82	1.95	.067	3.22	1.47	5.26
769	1.13	2.42	1.88	4.31	.243	4.26	2.97	9.74
770	-.49	4.82	2.72	2.28	-.297	4.64	3.50	9.18
771	-.76	1.72	-3.31	3.39	.706	4.22	2.68	7.64
772	-.44	.99	-2.15	3.39	-.201	3.45	2.04	7.17
773	-.17	2.12	-1.72	1.92	-.262	3.05	.90	4.09
774	.58	1.91	1.10	3.04	.546	2.98	2.09	6.66
775	4.97	3.42	-3.96	5.79	-.278	8.18	3.76	14.00
776	2.27	5.26	4.32	3.46	.678	6.54	4.19	11.64
777	3.94	3.89	-9.35	3.60	-.501	10.62	4.07	16.50
778	-3.81	2.84	-13.37	6.45	-.417	14.30	6.04	25.13

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SANTA MONICA 6HR WIND CHANGE 3-9 KM SUMMER

779	- .39	4.81	2.56	2.47	- .126	4.94	2.93	8.02
780	2.28	3.98	.85	1.01	- .832	4.01	2.25	8.09
781	- .63	1.40	- .56	2.57	.343	2.40	2.55	4.75
782	-3.32	6.00	- .87	2.71	.746	5.71	4.36	12.01
783	-1.88	2.62	- .71	1.40	.410	2.91	1.90	6.55
784	3.02	2.70	2.26	3.26	.062	4.79	2.80	7.58
785	2.24	2.64	-2.07	2.42	- .163	3.81	2.60	8.48
786	2.59	2.87	- .48	3.29	.420	4.34	2.26	6.56
787	- .53	2.35	2.62	1.89	.073	3.60	1.51	5.36
788	2.26	2.23	- .61	2.61	.701	3.74	1.38	5.93
789	1.34	1.62	1.70	.79	.639	2.56	1.05	4.25
790	4.43	2.63	2.85	3.34	.864	5.78	3.40	9.89
791	-4.72	2.73	2.26	3.67	.042	6.33	2.49	8.56
792	-1.01	1.20	.28	2.26	.452	2.18	1.52	4.46
793	-2.97	1.84	-1.12	2.31	.613	3.74	2.02	7.83
794	- .02	1.54	.96	2.38	- .520	2.50	1.36	4.59
795	- .31	3.18	1.93	2.51	- .085	3.75	2.12	6.22
796	- .39	2.48	.83	2.84	.162	3.36	1.44	5.40
797	2.16	2.07	-1.30	1.50	.686	3.29	1.12	4.68
798	- .63	2.05	-1.73	2.49	.351	3.12	1.73	5.76
799	.93	2.94	-2.56	1.81	.697	4.02	1.32	5.10
800	- .71	3.34	.41	1.65	.152	3.20	1.66	5.23
801	1.04	2.43	-1.24	2.00	.579	3.19	1.03	5.04
802	3.51	2.72	- .18	2.39	- .492	4.07	2.86	8.04
803	.76	4.64	.79	3.26	.748	4.41	3.31	9.67
804	3.61	6.03	.95	4.16	.869	6.66	4.25	15.39
805	-1.15	2.34	1.73	2.08	.362	3.31	1.43	5.18
806	3.78	2.47	2.15	3.91	.174	5.68	2.42	9.43
807	-4.34	3.00	-3.25	2.06	.245	5.86	2.74	9.23
808	-4.18	2.07	-1.94	1.58	- .050	4.94	1.76	7.63
809	.50	1.82	.57	2.46	.734	2.42	1.78	5.67
810	1.27	3.52	- .66	2.53	.695	3.45	2.70	7.98
811	-2.76	1.53	.86	1.87	.050	3.45	1.32	5.37
812	- .17	.96	-1.95	2.05	- .685	2.37	1.74	5.54
813	- .53	2.75	1.10	2.97	- .051	3.51	1.93	6.11
814	4.23	1.61	.68	2.99	- .593	5.15	1.41	7.10
815	1.25	2.16	1.06	1.94	- .101	2.79	1.57	5.00
816	3.85	3.49	2.24	3.19	.127	5.58	3.01	10.09
817	.52	1.89	1.01	.93	- .021	2.17	.69	3.42
818	1.41	4.24	1.24	3.37	.424	4.45	3.21	10.27
819	-1.23	2.41	.33	1.05	.209	2.28	1.65	4.64
820	- .91	1.60	.42	1.14	.836	1.86	1.00	3.34
821	.87	2.53	3.26	1.54	.299	4.14	1.44	7.06
822	-2.44	4.18	-1.41	3.19	.785	5.29	2.05	8.71
823	.62	1.54	.42	3.00	.427	3.03	1.14	4.03
824	1.85	1.04	- .85	1.90	- .266	2.72	.94	4.30
825	- .15	3.07	.37	1.93	.263	3.09	1.48	4.47
826	.55	2.18	.34	2.00	- .435	2.72	.79	3.92
827	- .77	1.39	.73	3.02	.322	3.01	1.35	5.22
828	2.14	2.98	.63	3.02	- .214	3.36	2.24	7.01
829	3.67	5.07	- .34	2.98	.712	5.78	3.39	12.03
830	.40	2.44	5.71	4.12	- .400	6.35	3.75	10.94
831	-5.32	2.09	- .18	2.37	.323	5.80	1.94	8.19
832	-1.73	1.51	1.37	1.90	- .277	2.72	1.73	5.05
833	-3.03	2.11	.05	2.43	.315	3.84	1.97	7.21
834	-1.05	2.09	.77	1.84	.009	2.72	1.05	4.11
835	-8.99	9.47	12.17	11.74	- .073	18.82	9.02	27.68
836	10.70	9.60	1.64	2.72	- .124	12.72	6.90	21.99
837	-2.16	1.25	.45	1.21	- .077	2.48	1.23	4.80
838	.63	.79	.92	1.44	.223	1.46	1.28	4.02

SANTA MONICA 6HR WIND CHANGE 3-9 KM SUMMER

839	.32	2.83	-2.67	5.39	.238	5.77	2.58	9.58
840	1.17	1.58	-3.14	2.74	.213	3.78	2.53	7.57
841	-1.77	3.02	.54	3.56	-.833	4.48	1.57	6.01
842	-.37	2.65	2.06	2.05	-.145	3.57	1.23	5.46
843	-.37	2.44	3.50	3.25	.445	4.48	2.75	8.25
844	2.02	2.63	2.93	2.69	.451	4.66	1.89	7.88
845	1.70	1.80	5.10	2.62	-.033	5.63	2.63	8.83
846	-1.26	1.74	.95	3.01	-.569	3.27	1.60	5.90
847	9.56	3.87	-9.33	7.34	-.195	14.33	6.13	21.02
848	1.71	1.10	-9.98	8.19	.301	10.28	8.04	27.65
849	1.44	2.91	3.34	2.51	-.270	4.59	2.38	7.76
850	2.57	1.20	4.64	1.71	.292	5.41	1.75	8.59
851	-2.21	2.18	.51	1.25	.281	2.90	1.58	5.22
852	-.10	1.84	-.40	1.55	.509	2.01	1.14	3.14
853	.82	1.61	.81	1.86	-.039	2.38	.98	3.67
854	2.03	2.00	-2.38	2.87	-.820	4.13	1.94	7.02
855	-1.20	1.65	2.84	1.92	.255	3.57	1.64	5.74
856	.64	3.16	-.13	3.90	-.388	4.60	.99	6.50
857	2.50	3.53	-3.73	3.32	.361	5.99	2.27	10.45
858	-.20	1.66	-2.00	3.34	.348	3.80	1.37	6.16
859	3.39	2.49	2.05	1.74	.256	4.51	1.95	6.84
860	-1.31	1.21	-1.24	2.86	.145	3.15	1.38	5.24
861	.66	2.58	.83	1.25	.469	2.39	1.69	5.70
862	1.02	1.98	-1.19	3.07	.694	3.21	2.05	7.24
863	-1.62	2.88	1.67	2.32	-.014	3.50	2.39	7.53
864	3.77	5.39	3.34	2.42	-.635	6.74	3.39	13.00
865	-1.11	2.91	.74	1.36	-.367	3.02	1.32	4.47
866	-.39	2.39	-.30	2.67	-.485	3.02	1.56	5.81
867	3.26	3.55	-2.19	2.73	-.546	4.60	3.66	10.12
868	-1.25	3.29	-4.23	2.25	.723	5.00	3.07	9.02
869	.11	2.19	3.20	1.40	.878	3.76	1.50	5.81
870	1.23	1.65	.88	2.27	.249	2.76	1.29	4.97
871	-3.13	3.00	-4.20	3.16	-.238	6.20	2.48	8.97
872	-1.62	2.87	1.18	4.00	.455	4.09	3.08	7.62
873	-1.32	3.68	-2.58	5.17	.491	5.55	3.76	13.35
874	-1.38	3.90	-1.85	4.36	-.604	4.84	3.61	12.09
875	-4.16	3.48	2.71	3.11	-.864	5.86	3.22	9.81
876	2.16	3.93	-4.18	4.67	-.758	5.81	4.88	13.90
877	.35	3.32	2.02	2.79	-.259	4.11	1.99	6.33
878	2.44	4.51	2.87	3.35	-.473	6.05	2.34	10.69
879	.90	3.28	2.21	1.52	.087	3.46	2.40	8.08
880	.64	4.72	-.03	1.78	-.953	4.25	2.21	6.96

MEAN DU(M/S)= .03
 MEAN DV(M/S)= -.01
 SD DU(M/S)= 3.35
 SD DV(M/S)= 3.49
 R(DU,DV)= .05
 MEAN W(M/S)= 3.92
 SD W(M/S)= 2.83
 SD MEAN(M/S)= 1.79
 MEAN MAXW(M/S)= 7.10
 SD MAXW(M/S)= 3.58

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SANTA MONICA 6HR WIND CHANGE 9-16 KM SUMMER

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	1.10	3.04	-1.55	3.90	.763	4.84	1.37	6.77
2	-7.18	3.73	-2.24	2.15	.713	7.66	4.01	13.27
3	-4.46	3.17	2.64	3.54	.067	4.70	2.37	8.78
4	2.55	5.22	.45	6.25	.495	7.14	3.96	15.21
5	-2.39	11.45	4.75	9.93	.995	14.42	4.94	20.36
6	-2.72	4.38	-3.18	3.08	.882	4.83	4.70	12.00
7	2.83	2.89	3.26	2.86	.403	4.87	3.26	10.16
8	2.75	1.93	-2.02	2.07	.201	3.86	2.08	6.56
9	-1.75	1.78	2.12	3.22	.448	3.88	2.22	8.50
10	.50	3.23	2.02	4.70	.555	4.58	3.68	13.26
11	.66	5.82	.77	2.89	.758	5.21	3.51	13.28
12	-25	4.37	.04	2.53	.062	4.36	1.97	8.21
13	-79	3.19	2.63	2.53	.329	4.03	2.57	8.85
14	1.05	2.74	-40	2.03	.514	2.81	2.01	6.00
15	.04	3.42	.17	4.48	.703	4.83	2.28	8.35
16	4.50	2.05	3.14	3.04	.191	6.07	2.40	9.01
17	.43	2.16	.38	2.08	.453	2.66	1.15	4.39
18	.77	2.72	1.75	2.73	.002	3.54	2.17	7.13
19	.30	2.77	.17	3.63	.097	3.95	1.77	6.23
20	-15	2.07	-2.14	2.74	.228	3.44	1.88	6.87
21	-3.14	1.79	.72	1.36	.054	3.46	1.80	6.67
22	-1.53	2.63	-91	1.88	.391	3.20	1.54	5.40
23	4.32	3.84	.48	2.65	.512	5.42	3.14	12.18
24	1.71	2.42	.30	2.60	.045	3.36	1.78	5.87
25	-2.39	1.56	.27	1.76	.172	2.83	1.73	5.28
26	.00	1.70	-3.05	2.89	.474	3.92	2.07	7.88
27	1.20	2.83	-86	3.94	.467	4.22	2.40	7.84
28	3.04	2.64	-2.33	1.77	.160	4.43	2.10	8.89
29	-4.70	5.03	.81	2.95	.046	6.64	3.09	10.36
30	-4.07	5.85	-3.74	3.98	.808	7.30	4.90	14.52
31	.24	2.49	-2.00	3.67	.058	3.82	2.75	8.24
32	2.12	2.07	7.38	6.19	.347	8.11	5.90	16.35
33	-4.42	3.30	2.21	6.86	.303	8.05	3.45	13.15
34	.93	3.59	6.88	4.15	.503	7.75	4.07	14.24
35	-2.74	4.32	2.81	3.26	.119	5.56	3.40	11.04
36	1.44	2.77	2.05	4.53	.040	5.11	2.35	9.13
37	-1.87	3.17	2.99	3.65	.450	4.96	3.09	8.21
38	-1.36	2.58	.13	1.56	.371	2.72	1.66	5.24
39	-28	2.70	2.50	3.28	.229	4.14	2.41	8.29
40	3.09	1.49	.60	3.26	.049	4.30	1.74	6.16
41	-25	2.80	3.85	3.89	.156	5.35	2.68	9.04
42	.14	3.41	.49	4.44	.484	4.75	2.44	8.60
43	3.40	6.60	3.27	4.52	.652	6.95	5.85	17.13
44	8.12	4.94	1.22	2.11	.532	8.42	4.98	18.40
45	-1.12	1.17	-1.44	3.32	.120	3.19	2.14	6.79
46	-4.82	3.06	-1.69	3.25	.796	6.19	2.41	10.84
47	1.04	2.01	1.11	2.85	.291	3.31	1.55	5.64
48	.72	4.02	.36	1.70	.138	3.63	2.17	8.16
49	4.22	2.14	-60	1.63	.467	4.48	2.25	7.25
50	.62	2.21	5.57	2.64	.355	6.09	2.32	8.34
51	-1.86	3.31	2.44	3.28	.726	4.59	2.89	9.30
52	-2.77	4.43	3.92	4.95	.838	7.40	2.80	10.43
53	-3.18	2.91	-1.15	2.64	.233	4.37	2.57	7.97
54	-6.27	3.95	-2.33	1.25	.069	7.12	3.20	12.30
55	-.05	8.03	-3.75	5.93	.924	9.64	3.12	13.86
56	.28	3.40	1.87	4.18	.411	5.04	2.01	7.93
57	3.67	4.46	3.29	4.08	.044	6.37	4.23	14.00
58	-2.71	6.51	-2.12	4.21	.830	6.84	4.48	13.24

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59	-2.63	2.43	-1.56	1.64	-.205	3.76	1.77	6.29
60	-1.54	2.14	-.97	1.70	-.177	2.84	1.42	5.39
61	1.24	2.11	-.51	1.65	-.354	2.64	1.12	4.18
62	2.33	5.49	-1.35	1.81	-.206	5.30	3.35	11.23
63	-2.7	2.71	.54	3.08	-.311	3.38	2.05	7.17
64	2.70	2.63	1.47	2.65	-.124	4.02	2.51	7.25
65	-.06	2.13	-1.04	2.67	-.645	2.88	1.86	6.17
66	-.82	1.75	-.12	1.81	-.693	2.31	1.02	4.02
67	-2.70	3.45	1.22	2.20	-.262	4.31	2.35	7.60
68	-.74	2.58	.59	3.12	-.284	3.63	1.55	5.75
69	-2.00	3.67	-4.70	1.57	-.259	6.03	2.03	8.96
70	.34	2.61	.19	2.08	-.679	2.65	1.81	7.01
71	.56	5.20	3.22	1.92	-.614	5.51	2.86	11.23
72	.46	3.44	2.23	1.93	-.185	4.11	1.51	6.11
73	-1.29	3.13	.88	1.73	-.732	3.31	1.75	6.05
74	3.18	5.40	-.94	1.75	-.011	5.07	3.92	12.85
75	-6.39	3.32	-14.53	9.23	-.747	16.09	9.40	27.88
76	-.46	2.36	-4.86	4.65	-.048	6.11	3.45	12.36
77	-.39	3.82	2.53	3.51	-.409	4.51	3.33	9.97
78	3.96	2.65	-.06	2.66	-.512	4.85	2.29	7.65
79	-2.34	4.07	-1.56	2.68	-.246	4.23	3.52	11.05
80	.02	2.38	1.06	3.93	-.043	4.21	1.47	6.01
81	.66	1.97	2.16	2.36	-.433	3.01	2.21	7.27
82	.65	2.33	1.48	1.69	-.311	2.58	1.90	6.97
83	-1.58	3.58	2.28	1.58	-.792	4.17	2.05	7.41
84	3.82	3.22	-1.15	2.01	-.476	4.72	2.67	8.48
85	-1.91	1.52	-2.53	2.63	-.966	3.79	2.07	8.07
86	-.96	2.35	1.42	1.63	-.252	2.89	1.42	4.51
87	-4.43	2.24	-1.43	2.24	-.427	5.24	1.83	8.04
88	1.25	3.46	-5.87	5.36	-.138	7.10	4.92	15.09
89	-.33	2.98	1.58	2.88	-.458	3.83	1.84	6.28
90	-1.03	1.57	.52	2.23	-.328	2.37	1.59	5.82
91	-.12	2.97	.73	1.93	-.151	3.22	1.15	4.79
92	2.43	2.88	-.14	3.65	-.562	4.69	1.80	7.06
93	-1.28	3.07	1.99	3.78	-.102	4.74	2.10	8.13
94	2.82	2.40	.31	2.48	-.247	4.01	1.63	6.56
95	-2.17	1.41	-.66	2.44	-.060	3.27	1.25	4.93
96	1.81	2.75	2.75	3.61	-.332	4.55	3.05	11.08
97	-.70	2.25	2.44	4.02	-.041	4.28	2.75	8.29
98	-1.57	2.03	1.55	1.81	-.039	3.17	1.21	5.13
99	.88	1.94	-.08	1.87	-.374	2.35	1.35	5.01
100	2.80	2.15	-3.84	4.51	-.629	5.81	3.48	9.88
101	1.92	2.28	-.31	1.02	-.673	2.58	1.70	5.04
102	-.29	2.49	.36	2.77	-.102	3.34	1.16	5.24
103	-.03	2.39	-1.72	2.55	-.247	3.61	.85	5.13
104	-.19	3.49	-3.30	5.32	-.805	5.55	4.22	11.55
105	1.51	1.40	3.35	2.80	-.555	4.34	1.93	6.84
106	-1.95	3.91	-.36	2.83	-.849	3.87	3.28	10.51
107	.58	2.29	.02	1.79	-.105	2.45	1.39	4.83
108	.00	2.17	.25	2.32	-.158	2.55	1.65	5.71
109	5.57	2.10	4.32	3.01	-.336	7.49	2.50	11.18
110	10.16	5.46	2.27	3.28	-.186	10.95	5.23	17.48
111	3.55	4.50	-3.60	6.75	-.457	8.87	2.28	11.92
112	-.29	5.24	-5.32	5.70	-.204	5.92	4.27	15.72
113	-3.91	5.61	-.25	2.19	-.463	5.92	3.72	12.59
114	.53	2.26	-1.49	3.66	-.082	3.75	2.30	7.37
115	3.09	2.61	2.61	.67	-.483	4.58	1.78	8.01
116	.99	1.42	.77	2.57	-.588	2.64	1.57	5.82
117	.86	3.40	.63	4.27	-.102	4.53	2.76	10.02
118	-.92	2.38	-1.25	2.42	-.011	3.16	1.70	6.41

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119	-1.90	2.21	-2.91	.95	.137	3.96	1.30	6.01
120	-2.44	1.62	-2.29	2.29	-.280	3.39	1.56	5.94
121	-2.03	4.05	-4.16	2.44	.198	5.63	3.27	9.48
122	-.23	3.49	-4.65	4.10	-3.11	6.14	3.27	13.21
123	2.31	2.02	-1.55	5.00	-.495	4.44	3.93	12.99
124	2.49	2.63	3.51	6.87	-.217	7.04	4.32	16.95
125	-3.39	3.39	-.84	5.51	-.671	6.11	3.62	11.30
126	-.70	2.23	-7.26	5.26	-.627	7.56	5.30	15.60
127	1.51	2.38	1.84	1.90	.448	3.58	1.03	5.30
128	1.55	1.12	2.50	3.76	.832	3.70	1.03	5.30
129	-.47	4.06	-7.61	8.02	.505	9.08	7.28	11.22
130	3.43	5.13	1.76	3.69	-.359	6.71	2.35	21.85
131	-.44	2.17	-.24	2.86	.279	2.97	1.77	9.19
132	2.06	1.44	-.30	.84	.067	2.27	1.35	6.14
133	-.82	2.33	1.58	1.38	.380	2.85	1.30	4.05
134	.37	3.14	3.34	1.41	-.325	4.57	1.99	4.90
135	-.80	1.57	.48	2.52	.042	2.67	1.30	5.37
136	1.51	1.77	.24	2.38	-.630	3.05	.91	5.68
137	-1.19	2.56	-.21	2.06	.091	3.05	1.36	4.17
138	-1.51	1.54	1.80	3.56	-.735	3.20	3.10	5.28
139	-.98	2.59	.52	2.60	-.613	3.15	1.87	9.71
140	2.44	2.38	1.98	2.82	.651	3.95	2.66	8.40
141	.16	2.99	-2.45	2.42	.415	3.56	2.68	7.34
142	-.59	2.15	-.92	3.36	.560	3.60	1.55	6.92
143	-.74	1.60	3.31	2.31	-.584	3.60	1.55	6.92
144	2.82	2.82	1.91	2.94	-.255	4.68	2.45	8.25
145	-2.67	2.48	-4.28	1.53	.012	5.49	2.19	8.34
146	-4.51	4.16	-8.86	6.40	.658	10.46	6.79	8.43
147	-1.27	3.30	-3.75	3.19	-.520	5.43	2.29	19.87
148	.20	4.26	4.08	2.99	.288	5.63	3.16	8.25
149	-.36	1.47	-1.12	1.09	.167	1.54	3.16	10.57
150	.80	2.26	-2.07	2.03	-.148	3.34	1.45	3.00
151	-1.14	3.30	1.80	2.06	-.052	3.83	1.89	5.36
152	1.50	1.62	1.75	2.34	-.580	3.38	1.04	7.10
153	-2.96	1.91	-4.27	6.81	-.640	8.12	2.33	5.05
154	-.26	2.49	-.95	2.30	.315	2.89	1.76	11.37
155	-.70	3.69	-5.61	4.23	.860	2.96	1.76	6.00
156	13.80	7.56	8.57	8.60	.558	6.96	3.57	11.96
157	-2.59	4.48	-.83	2.89	.360	17.06	10.00	28.90
158	-.60	5.98	-.78	5.17	-.302	4.84	3.18	11.98
159	-1.83	2.26	2.43	.85	-.344	6.08	4.62	14.14
160	1.31	2.23	3.32	2.22	-.008	3.66	1.04	5.76
161	-.02	2.40	-1.84	2.24	-.145	4.30	1.81	6.19
162	.13	1.72	-2.38	2.51	-.172	3.09	1.93	6.50
163	1.48	2.92	.39	1.96	-.838	3.14	2.11	6.56
164	.43	3.30	-.07	1.59	-.162	3.16	1.95	6.43
165	-1.62	4.43	-2.80	2.00	.338	3.16	1.49	6.07
166	-2.16	2.90	-2.32	3.40	.415	5.16	2.28	8.93
167	-.15	1.04	3.12	1.51	-.544	4.68	2.54	9.40
168	4.84	1.76	-.30	1.29	-.267	3.27	1.52	5.40
169	.22	3.70	2.78	4.02	-.166	5.01	1.71	7.67
170	-.90	3.67	1.67	3.21	-.582	5.02	3.15	11.26
171	2.04	3.07	.21	2.48	-.675	4.48	2.22	8.20
172	2.76	3.85	-.79	2.77	.407	3.47	2.58	8.59
173	-3.60	3.71	1.45	3.89	-.039	4.86	2.23	7.49
174	-1.79	5.58	.90	4.15	.036	5.98	2.27	9.03
175	-.94	3.46	2.32	3.71	.762	6.35	2.62	9.38
176	-4.97	5.66	-1.28	2.75	.657	4.17	3.60	12.02
177	-6.64	4.25	-1.71	3.97	.782	6.29	4.95	15.09
178	-1.26	3.35	-.86	3.40	.351	7.56	4.73	16.12
						4.01	2.66	9.75

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179	-2.36	5.47	6.63	.206	8.03	2.75	11.72
180	-1.92	5.17	4.45	.114	7.25	4.49	13.71
181	-1.58	2.50	2.51	.316	4.84	2.16	8.32
182	.46	2.33	2.14	-.002	3.72	1.75	6.78
183	-.56	2.30	2.68	.352	3.15	1.47	5.79
184	.63	1.29	1.81	.224	1.93	1.08	3.50
185	-5.87	5.85	3.55	.719	7.86	4.90	16.04
186	-.55	3.38	5.18	-.280	5.48	2.93	10.64
187	-2.23	2.24	3.47	-.289	3.91	2.33	7.73
188	-1.23	3.58	2.71	-.590	3.85	2.59	7.76
189	-2.96	3.62	2.34	.477	4.91	2.44	9.44
190	-1.41	2.61	2.23	.039	3.25	1.67	6.07
191	.15	3.40	7.22	.158	7.03	3.59	11.56
192	-2.04	3.40	3.97	.132	4.83	2.52	8.78
193	-.96	3.40	3.20	.066	4.29	1.36	6.27
194	.34	4.46	4.07	.606	5.74	3.06	10.64
195	1.10	2.90	3.26	.230	3.98	2.52	7.99
196	-4.04	2.61	4.25	.466	8.34	3.80	11.61
197	-5.11	3.59	4.21	-.432	7.44	3.13	11.01
198	.34	3.11	5.55	-.270	7.48	4.37	16.57
199	-4.23	4.06	10.92	.703	15.77	10.95	35.57
200	-.11	4.50	10.41	.186	12.09	7.68	22.39
201	-.95	3.87	5.33	.472	5.89	2.22	9.80
202	.74	1.67	3.01	-.441	3.20	1.62	6.10
203	1.63	1.88	3.35	.090	3.54	1.71	5.61
204	3.53	1.83	2.33	-.067	4.21	1.71	7.37
205	-1.82	2.65	3.69	.315	4.22	2.05	6.93
206	-1.04	2.65	1.93	-.235	4.60	1.25	6.61
207	-6.47	4.43	8.50	.628	14.54	7.72	28.60
208	-4.56	4.70	5.69	.384	8.93	5.41	16.21
209	-.19	2.52	3.73	-.366	3.49	2.55	8.00
210	1.25	1.74	2.13	-.304	2.72	1.21	4.92
211	-.52	1.30	1.95	.651	2.86	1.49	5.83
212	.50	1.21	1.02	.224	2.48	1.09	4.12
213	2.11	3.32	2.08	-.759	5.13	1.61	7.35
214	2.80	4.34	3.70	-.169	5.85	1.67	8.42
215	-.93	4.43	3.79	.774	5.09	2.81	10.00
216	-.77	2.22	2.88	.342	3.56	1.36	5.11
217	-.37	1.16	1.90	-.959	1.72	1.33	3.74
218	3.64	1.74	2.17	.581	6.24	2.49	9.32
219	3.22	5.69	7.45	-.927	7.87	5.98	22.39
220	-3.09	1.95	2.84	-.085	3.96	2.22	7.07
221	-1.59	4.14	2.44	.373	4.12	2.61	9.22
222	-1.42	1.60	2.46	-.075	3.46	2.01	7.56
223	.47	3.19	2.25	.374	3.36	1.67	7.46
224	-.95	2.88	4.16	.312	4.16	2.82	10.79
225	-.36	2.24	4.20	.015	4.41	1.53	6.60
226	1.16	3.82	3.13	-.456	5.48	1.78	7.94
227	2.40	2.53	4.30	.441	5.23	2.39	9.38
228	1.81	4.37	3.32	.261	5.83	3.03	9.94
229	-1.10	2.81	2.37	.080	3.42	1.46	5.39
230	-1.27	1.31	1.80	.048	2.10	1.38	3.62
231	-2.98	3.02	1.81	.655	4.56	2.91	8.20
232	-1.13	3.05	2.58	.625	4.20	2.40	8.61
233	-1.20	2.07	2.80	-.678	2.88	2.10	6.82
234	-1.76	3.21	2.87	.708	3.82	2.61	9.99
235	.27	3.97	.90	-.220	3.29	2.15	7.42
236	2.41	5.06	3.16	.368	5.14	3.52	11.51
237	-1.20	2.73	2.43	.604	3.04	2.15	5.84
238	-2.46	2.21	1.91	.189	3.56	1.39	5.29

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239	2.26	2.19	1.65	1.60	-.419	3.44	1.65	5.69
240	-.99	1.82	-.31	2.37	.515	2.78	1.14	4.06
241	-.21	3.09	.14	3.22	.076	3.96	1.45	5.81
242	-2.19	.85	-3.81	4.02	-.154	5.50	2.07	8.34
243	-2.50	3.77	-.89	5.99	.265	7.43	3.22	13.01
244	3.40	3.39	5.44	3.85	.201	3.79	3.22	11.21
245	-.31	3.03	-1.40	2.34	.308	3.56	.80	4.71
246	-1.40	2.12	-1.99	2.97	.167	3.19	2.38	8.16
247	-.10	3.26	-.21	2.04	.119	3.51	1.82	6.57
248	1.58	2.54	-.33	2.56	-.153	3.51	1.40	5.40
249	-1.42	3.05	2.04	3.41	-.435	4.11	2.97	9.34
250	2.45	2.50	1.32	2.91	-.338	4.37	1.31	6.71
251	.30	3.00	-2.77	3.27	-.072	4.36	2.62	9.09
252	-.24	4.88	-.22	2.09	.297	4.45	2.38	9.00
253	-.75	1.21	-.44	3.10	.336	2.98	1.34	5.56
254	-.05	2.21	-8.05	6.55	.473	8.40	6.42	18.74
255	.11	4.95	3.30	3.22	.707	4.88	4.49	15.19
256	-.23	2.29	1.30	1.80	-.168	2.83	1.16	4.64
257	-1.26	2.85	-.83	2.51	-.281	3.68	1.25	5.41
258	.55	2.42	-1.34	2.25	-.238	3.04	1.67	5.26
259	.80	4.46	-2.01	5.14	-.699	5.61	3.96	11.74
260	1.52	3.43	1.69	2.41	.002	3.71	2.79	7.81
261	-1.70	2.65	2.47	3.18	.376	4.58	1.86	7.57
262	.69	1.95	-3.36	2.95	.801	4.52	1.62	6.05
263	-.80	2.35	1.07	2.55	.441	3.29	1.30	5.93
264	-2.63	1.81	1.80	2.58	-.427	4.16	1.31	7.09
265	3.10	4.02	-2.40	2.20	.406	5.08	3.02	10.67
266	1.26	3.63	.06	2.79	.224	3.99	2.15	7.31
267	.23	2.80	1.11	3.47	.045	4.21	1.03	6.31
268	-2.80	1.64	-3.03	3.21	.070	5.14	1.49	7.21
269	-.29	3.43	-3.48	2.95	-.388	5.14	2.06	7.61
270	.21	4.16	-3.56	1.93	.176	5.04	2.55	8.36
271	-1.45	3.02	2.10	2.86	.210	4.09	2.36	8.82
272	-1.16	2.06	.79	2.85	.177	3.30	1.49	5.64
273	-.32	3.23	3.13	2.72	-.108	4.89	1.34	6.75
274	-1.66	.96	3.35	3.93	-.512	4.97	2.03	7.88
275	-1.16	2.63	.71	1.63	.439	2.84	1.57	5.37
276	-1.27	3.26	.26	2.11	.806	3.27	2.19	6.56
277	-.66	1.96	.63	1.89	.259	2.32	1.47	4.61
278	.99	2.09	-.28	1.84	-.254	2.73	.70	3.60
279	.26	2.65	.10	2.34	.746	2.91	1.70	7.02
280	3.94	1.49	-1.20	5.74	-.735	5.84	3.95	14.53
281	-.13	4.87	3.14	3.59	-.331	5.95	2.72	9.13
282	-2.85	4.35	3.24	4.26	-.667	6.28	3.62	11.83
283	-.10	1.51	-2.17	3.12	.077	3.40	2.05	7.07
284	1.19	2.57	1.82	3.63	-.577	4.09	2.46	7.63
285	1.29	2.65	.00	1.92	.049	3.16	1.07	5.04
286	1.37	2.40	2.89	3.10	-.111	4.32	2.39	8.73
287	-3.71	3.48	1.41	2.34	-.758	4.95	2.73	8.65
288	.38	2.37	.67	2.48	.763	3.04	1.37	4.08
289	-7.34	4.73	2.10	1.51	.130	8.07	4.12	14.37
290	2.71	5.71	.96	3.07	.855	5.53	4.06	12.10
291	3.74	6.63	1.07	5.48	.424	8.44	3.12	13.50
292	11.61	5.91	-8.17	7.48	.111	15.91	5.66	20.15
293	-2.45	3.75	-1.61	2.17	-.869	4.38	2.58	9.48
294	-3.03	3.21	2.16	2.65	.583	5.03	2.03	7.41
295	1.38	4.66	2.88	2.10	-.188	5.27	2.44	9.02
296	-3.44	4.20	-1.72	3.39	-.074	5.97	2.29	10.76
297	-.21	3.48	-.33	2.31	.409	3.61	1.64	6.35
298	1.21	2.15	1.19	3.02	.278	3.47	1.81	6.02

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299	-1.73	3.68	1.92	2.17	4.27	2.26	8.01
300	-1.77	3.02	1.23	2.73	3.39	1.92	6.43
301	-3.43	2.83	.45	2.41	4.44	2.22	7.60
302	2.69	2.66	.86	6.96	6.42	4.19	12.75
303	-32	1.50	-2.47	2.60	3.23	2.03	6.41
304	-79	4.68	-.90	2.77	4.72	2.40	9.85
305	1.70	2.69	.76	4.02	4.37	2.35	7.56
306	-29	2.79	-1.76	3.71	4.43	1.65	6.44
307	-2.02	2.64	-.32	1.89	3.05	2.16	6.12
308	-.48	3.59	-.27	3.11	3.91	2.34	7.44
309	-2.12	2.81	-.07	3.36	3.92	2.60	8.03
310	4.89	3.74	-1.49	4.58	6.24	4.52	15.22
311	-.43	2.55	.36	1.99	2.81	1.34	5.17
312	-1.66	1.88	.98	1.74	2.77	1.41	5.32
313	-1.07	3.29	-1.73	2.19	3.48	2.55	7.65
314	1.96	3.44	-1.88	3.59	4.44	3.27	8.75
315	-.96	3.06	1.36	2.33	3.47	2.05	7.44
316	-.33	2.32	-.16	1.93	2.59	1.24	4.99
317	-1.04	1.94	.89	3.79	3.91	1.67	5.84
318	1.47	1.80	3.04	5.04	4.99	3.64	12.00
319	-.84	2.80	-.98	4.67	3.95	3.70	9.90
320	.54	3.45	1.03	4.28	3.74	3.97	12.44
321	-.31	2.88	3.33	3.77	4.94	2.71	9.86
322	1.23	3.68	.05	2.71	4.16	1.67	7.15
323	-2.18	2.71	2.81	3.10	4.89	2.01	8.16
324	.12	1.82	-2.39	3.92	3.58	3.25	11.40
325	-1.97	1.55	-1.53	1.34	3.01	.97	4.41
326	-1.54	2.11	-.18	2.18	2.92	1.51	5.89
327	.14	1.14	2.27	2.09	3.09	.82	4.08
328	.17	3.40	.69	3.11	4.06	1.73	6.40
329	-.38	2.09	1.26	2.02	2.76	1.33	4.60
330	-.81	3.37	.13	2.01	3.16	2.18	7.44
331	-.20	2.69	2.13	1.28	3.34	1.18	4.80
332	2.69	2.55	-1.30	1.68	3.69	1.99	6.78
333	-3.15	4.15	-.21	3.93	4.99	3.94	11.42
334	-1.52	1.84	-1.93	1.73	2.95	1.84	5.84
335	-2.07	1.60	1.94	.95	3.13	1.22	5.16
336	1.41	1.14	-.63	1.94	2.35	1.21	4.71
337	1.06	2.05	2.59	1.55	3.39	1.54	5.47
338	1.01	1.97	-.59	1.69	2.16	1.71	5.94
339	.43	4.37	-.88	2.16	3.95	2.64	7.57
340	.01	1.54	-1.11	3.37	3.32	1.58	5.42
341	-.89	5.95	-1.77	4.88	7.17	2.24	11.15
342	.34	3.76	-2.49	4.59	5.69	2.32	9.43
343	-.68	2.75	-1.44	3.22	3.92	1.79	6.81
344	-.80	3.66	1.14	2.67	4.24	1.46	7.37
345	1.68	2.30	.86	2.74	3.42	1.87	6.57
346	3.15	4.58	.15	3.05	5.45	2.73	10.06
347	-.56	3.46	-.22	2.70	3.73	1.93	6.80
348	-.48	2.65	1.08	2.24	3.13	1.56	5.35
349	3.72	3.30	-1.48	1.20	4.41	2.91	8.29
350	7.43	6.21	-1.43	4.12	8.87	5.58	17.35
351	-.98	2.49	1.49	2.54	3.34	1.88	6.15
352	1.63	4.14	.41	2.39	4.26	2.30	7.51
353	-3.44	1.84	-1.10	1.17	3.90	1.50	5.62
354	-1.51	2.97	-.08	2.53	3.74	1.38	5.57
355	.89	2.64	1.36	2.25	3.32	1.57	6.01
356	-.95	2.37	-.13	3.66	3.84	1.79	6.34
357	-.36	4.05	1.22	1.85	3.98	1.90	6.98
358	-1.15	4.11	-.78	2.80	4.59	1.69	7.62

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359	- .73	2.26	-1.16	2.69	.267	3.26	1.53	5.87
360	- .40	1.26	2.63	2.40	.305	3.17	1.99	6.56
361	- .11	1.39	.75	1.02	.738	1.37	1.21	3.65
362	1.60	1.75	-1.80	2.20	.279	3.11	1.86	5.98
363	-1.47	1.99	.07	2.27	.779	3.00	1.14	5.01
364	- .59	1.27	2.45	1.35	.412	2.78	1.36	4.69
365	.88	1.57	.46	1.62	-.357	1.86	1.51	4.69
366	1.18	1.66	-.06	2.36	.084	1.86	1.51	3.81
367	-1.37	3.11	1.09	2.11	.105	3.62	1.09	4.19
368	- .71	2.33	-.38	3.06	-.253	3.45	1.63	5.70
369	-1.25	2.62	5.12	3.50	.029	3.57	1.37	5.02
370	2.04	4.01	-1.21	5.23	.289	5.85	3.28	11.22
371	-2.50	2.49	-.84	3.11	.035	4.23	1.83	9.33
372	-.73	1.21	-.24	2.44	.011	2.41	1.20	5.77
373	-3.62	3.55	.49	1.72	-.419	4.21	1.20	4.44
374	1.40	1.28	-2.04	1.68	-.299	2.95	1.23	10.83
375	-.92	2.35	-1.46	3.69	-.136	4.03	1.99	4.59
376	1.00	2.50	-1.31	2.53	.055	3.32	1.77	7.10
377	-1.38	3.91	3.29	2.69	.335	5.44	1.82	5.89
378	-.90	2.51	2.74	.97	.312	3.65	1.25	8.53
379	-1.30	2.47	-.25	5.97	.031	5.12	3.73	5.01
380	2.56	2.55	1.15	3.01	.135	3.72	2.95	11.67
381	.53	2.91	3.45	2.97	.010	4.58	2.70	7.61
382	2.82	2.44	4.36	3.14	-.192	5.96	2.47	9.40
383	-1.86	2.18	-.06	3.35	.605	3.57	2.33	9.50
384	.85	1.87	2.42	3.54	-.524	4.37	1.30	8.88
385	- .11	2.68	-.37	1.94	-.325	2.50	1.99	5.81
386	-.84	3.78	-.63	2.99	.799	3.91	2.67	5.66
387	-1.74	2.67	-.05	4.54	.547	4.84	2.10	9.01
388	1.54	2.18	.45	3.02	.376	3.38	1.93	7.18
389	-1.58	2.04	-.64	4.23	.097	3.84	2.92	9.76
390	1.99	4.18	-1.17	3.00	-.641	4.76	2.58	8.77
391	.15	4.05	-.18	4.70	.466	5.29	2.57	8.50
392	.35	3.81	-2.44	3.00	-.852	4.58	2.55	9.56
393	-1.00	3.15	.06	2.77	-.337	3.66	1.88	6.80
394	.20	1.97	.91	4.11	.394	3.80	2.28	7.99
395	-.96	2.30	1.37	3.27	.327	3.92	1.26	6.75
396	1.67	2.97	-.33	3.84	.579	4.33	2.33	7.12
397	-3.80	4.03	-.26	3.35	-.238	5.77	2.46	11.21
398	-.88	3.56	.22	3.93	-.150	4.35	2.72	8.30
399	-6.51	6.09	4.10	2.74	-.014	8.80	4.85	17.61
400	-2.39	4.24	-3.22	4.07	-.437	6.06	3.31	10.20
401	1.54	3.46	.87	3.71	.381	4.59	2.28	7.26
402	3.70	4.53	1.92	2.27	.219	5.62	3.07	10.70
403	-.74	2.10	.52	2.20	.132	2.64	1.48	5.03
404	-.39	2.62	1.99	2.44	-.178	3.66	1.50	5.71
405	-.42	3.40	-1.42	2.60	-.130	3.87	1.91	6.33
406	.89	3.69	-1.85	1.93	-.258	4.16	1.51	6.99
407	.44	2.86	.34	3.15	-.371	3.71	1.64	6.21
408	-.21	3.24	-.28	2.11	-.364	3.26	1.71	5.58
409	-.07	2.74	1.61	2.20	-.115	3.52	1.08	5.15
410	2.78	3.54	-.26	2.89	.506	4.84	1.73	8.20
411	.31	1.46	.77	3.91	.125	3.47	2.10	6.58
412	-.42	3.25	-1.00	2.45	.041	3.71	1.48	5.94
413	-1.54	1.53	1.04	3.17	.391	3.39	1.79	7.00
414	-.91	1.52	-1.85	3.53	.280	3.41	2.52	8.10
415	-.37	2.54	-1.01	2.07	-.460	2.76	1.82	6.01
416	2.65	3.87	-.10	2.55	-.738	4.87	1.56	7.31
417	-2.53	2.18	-.49	1.37	-.295	3.22	1.55	5.00
418	-1.18	1.88	-.76	1.90	-.505	2.66	1.16	4.26

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419	1.55	1.19	- .96	3.96	3.55	2.55	8.57
420	.35	3.10	1.09	2.62	3.53	1.95	8.03
421	- .08	3.05	- .36	2.28	2.99	2.11	7.40
422	- .81	1.28	- .37	2.23	2.42	3.28	3.28
423	- .50	2.17	.71	2.47	3.03	1.08	5.18
424	.28	2.96	.82	1.97	3.14	1.51	5.14
425	-2.14	2.56	1.44	1.36	3.61	1.04	5.13
426	-4.75	3.88	.44	3.52	6.01	3.50	13.56
427	-3.16	2.62	-3.65	2.56	5.41	2.58	8.98
428	2.66	3.19	2.26	3.08	4.45	3.32	11.38
429	- .06	3.52	.98	2.23	3.59	1.92	7.27
430	2.41	2.41	- .05	2.42	3.37	2.31	5.75
431	-3.96	2.40	-2.33	2.12	5.20	1.84	8.57
432	.21	2.04	- .54	4.71	4.07	2.80	9.08
433	- .60	3.13	1.04	2.85	4.00	1.13	5.83
434	1.28	3.89	- .36	2.57	4.11	2.11	8.33
435	- .49	2.30	-4.02	2.98	5.05	1.93	9.30
436	- .41	1.63	.98	2.12	2.55	.99	3.79
437	2.36	2.37	1.00	3.12	4.09	1.93	7.00
438	1.59	3.25	- .10	2.79	4.15	1.25	6.29
439	1.56	3.32	- .29	3.73	4.30	2.58	9.99
440	2.00	1.60	1.72	2.16	3.30	1.67	5.50
441	2.75	3.58	- .20	5.64	6.07	3.34	9.97
442	2.77	1.66	-2.99	1.89	4.47	1.58	6.39
443	.10	3.08	- .05	3.43	4.06	1.58	6.72
444	- .61	3.37	.04	3.00	3.53	2.55	8.89
445	-1.30	2.42	2.46	4.85	5.55	1.74	8.07
446	3.21	1.61	.25	3.99	4.70	2.25	8.31
447	1.45	3.58	- .69	4.96	5.02	3.40	9.01
448	.20	2.33	1.96	2.53	3.35	1.86	6.54
449	-1.06	3.13	1.78	2.20	4.12	.38	4.69
450	- .56	3.95	.09	4.39	4.92	2.74	10.42
451	- .58	4.71	-1.19	2.85	4.77	2.52	9.25
452	1.56	2.22	-3.61	1.63	4.46	1.57	6.20
453	- .10	1.91	4.83	4.15	5.35	3.86	13.01
454	-3.63	2.87	- .78	2.34	4.53	2.45	9.34
455	-1.80	3.74	.17	4.17	4.93	2.71	8.71
456	1.41	3.53	.88	3.95	5.14	1.03	6.39
457	- .79	4.11	.04	2.58	4.32	1.72	6.71
458	-3.30	2.77	-6.89	3.79	8.40	2.84	12.01
459	3.20	3.21	-2.91	4.18	6.26	2.07	9.03
460	2.63	4.54	- .73	4.41	4.21	2.15	8.50
461	-4.57	7.62	-9.18	4.08	5.46	3.80	12.92
462	.99	4.39	1.85	2.25	11.71	6.17	21.86
463	-1.04	2.41	-2.35	4.21	4.41	1.51	6.72
464	- .35	4.00	.83	2.66	4.06	2.98	8.08
465	3.29	3.30	.22	2.30	3.99	2.27	6.83
466	-2.63	1.57	- .44	3.79	4.21	3.23	10.41
467	.20	1.55	-2.11	3.86	3.40	2.05	9.96
468	-15.77	13.04	-4.74	3.42	18.44	10.15	28.62
469	-1.47	4.05	3.84	2.27	5.80	1.54	7.62
470	-1.24	6.05	- .34	2.96	6.10	2.17	10.50
471	2.27	2.81	.31	2.91	3.71	2.58	7.01
472	.74	1.92	-2.31	2.68	3.56	1.75	5.83
473	- .70	2.49	- .47	2.94	3.24	1.92	5.66
474	1.37	.98	.18	3.35	3.18	1.67	7.00
475	- .22	2.63	1.02	3.72	3.99	1.95	6.39
476	2.68	2.76	-6.01	5.92	7.95	4.46	15.20
477	.05	1.39	- .87	2.84	2.76	1.48	4.88
478	1.33	2.54	.28	3.10	3.52	2.00	6.01

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479	.14	3.93	1.99	2.70	-.271	4.57	1.86	4.57	1.86	7.57
480	.53	1.22	2.26	2.65	-.050	3.23	1.65	3.23	1.65	6.16
481	-1.41	2.91	-.34	1.63	.149	2.87	2.04	2.87	2.04	6.00
482	-1.81	3.17	-.69	2.28	-.010	3.81	1.71	3.81	1.71	6.05
483	-1.15	3.57	-2.93	6.12	-.176	6.39	3.66	6.39	3.66	11.00
484	-1.32	3.33	-1.16	2.06	-.233	3.63	1.39	3.63	1.39	5.22
485	-.39	4.07	1.59	3.32	-.224	4.83	1.99	4.83	1.99	8.41
486	.95	2.43	-1.18	3.52	.169	4.11	1.27	4.11	1.27	5.71
487	-2.97	1.37	-1.70	2.28	-.311	4.10	1.14	4.10	1.14	5.63
488	-.85	2.96	-.32	2.87	-.445	3.57	1.83	3.57	1.83	6.57
489	.43	3.66	2.84	3.47	-.274	5.12	2.22	5.12	2.22	8.70
490	2.18	2.49	1.86	2.40	.532	3.69	2.40	3.69	2.40	7.41
491	-2.79	3.50	4.51	1.98	.163	6.13	2.33	6.13	2.33	9.30
492	2.21	2.55	2.80	2.56	-.342	4.50	2.10	4.50	2.10	8.05
493	1.72	3.71	-1.78	2.77	.648	4.62	2.02	4.62	2.02	8.15
494	2.35	5.04	.71	4.92	.308	6.46	2.96	6.46	2.96	10.80
495	1.75	6.50	-4.18	4.90	-.734	6.92	5.93	6.92	5.93	19.33
496	.62	4.17	-3.02	4.70	-.753	5.92	3.20	5.92	3.20	10.61
497	2.09	1.67	2.57	2.32	.586	3.83	2.00	3.83	2.00	6.23
498	-1.52	4.07	.00	4.85	-.779	4.94	3.85	4.94	3.85	10.84
499	-.61	4.10	.41	5.49	-.085	5.60	3.42	5.60	3.42	9.58
500	2.26	3.94	-.84	4.51	.579	5.82	1.95	5.82	1.95	7.17
501	-1.55	3.64	3.43	3.10	.001	5.00	3.23	5.00	3.23	10.02
502	3.03	5.69	.99	6.72	-.307	7.78	4.47	7.78	4.47	16.31
503	1.08	4.83	.22	1.74	.456	4.33	2.53	4.33	2.53	8.60
504	-.06	4.61	-.83	4.97	.131	5.82	2.84	5.82	2.84	10.29
505	.19	3.74	1.28	3.78	-.045	4.66	2.31	4.66	2.31	8.77
506	-.24	2.76	1.19	3.37	-.663	4.07	1.33	4.07	1.33	6.39
507	-2.24	3.55	-1.93	2.86	.040	4.68	2.41	4.68	2.41	8.40
508	5.32	4.33	2.08	2.76	.918	6.46	4.00	6.46	4.00	11.68
509	-.26	2.10	3.81	3.94	-.203	5.07	2.70	5.07	2.70	9.59
510	.77	2.14	-5.43	3.09	.186	6.06	2.54	6.06	2.54	9.00
511	-1.19	3.05	.15	1.60	.270	3.18	1.39	3.18	1.39	5.36
512	-1.58	1.85	-1.82	2.95	.188	3.45	2.26	3.45	2.26	6.75
513	7.05	4.73	1.90	2.57	.242	7.89	4.33	7.89	4.33	13.01
514	-2.31	3.76	-2.34	4.66	-.424	5.45	3.77	5.45	3.77	11.61
515	-.77	1.60	-.45	2.14	.367	2.49	.98	2.49	.98	3.94
516	2.27	1.29	.23	1.85	.161	2.83	1.36	2.83	1.36	4.53
517	-1.26	2.97	1.77	1.02	-.095	3.08	2.10	3.08	2.10	7.46
518	1.25	1.83	-1.54	2.78	.207	3.21	1.94	3.21	1.94	6.83
519	-3.04	1.94	.47	2.42	.684	3.90	1.74	3.90	1.74	7.13
520	-.57	1.49	1.05	1.47	-.251	2.11	.98	2.11	.98	3.80
521	.22	2.85	-.43	3.06	.105	3.62	1.68	3.62	1.68	6.60
522	2.55	3.22	-1.35	3.35	-.515	4.33	3.12	4.33	3.12	9.82
523	-2.31	3.66	-3.20	3.52	-.173	5.68	2.59	5.68	2.59	9.75
524	.30	3.04	1.81	3.25	-.776	3.93	2.45	3.93	2.45	8.06
525	.12	3.96	-.23	3.44	-.542	4.39	2.36	4.39	2.36	8.11
526	-.02	4.00	.01	4.22	.512	5.02	2.24	5.02	2.24	9.15
527	-1.36	1.86	.73	.86	.069	2.10	1.37	2.10	1.37	4.46
528	1.20	2.18	1.71	2.54	.866	3.36	1.82	3.36	1.82	5.71
529	.26	3.37	-.26	2.82	.598	3.87	1.56	3.87	1.56	6.38
530	1.65	1.47	-6.40	2.19	-.078	6.75	2.19	6.75	2.19	9.26
531	-3.53	3.38	-.40	3.69	.044	5.28	2.77	5.28	2.77	10.34
532	-2.80	3.56	.31	3.30	.652	4.92	2.23	4.92	2.23	7.76
533	.14	4.96	1.51	5.02	.548	6.30	2.64	6.30	2.64	10.29
534	3.09	2.66	-2.81	3.69	-.218	5.53	2.39	5.53	2.39	10.50
535	-1.50	1.92	2.06	4.03	-.185	4.19	2.69	4.19	2.69	8.19
536	-.49	4.96	1.67	2.19	.176	5.00	2.09	5.00	2.09	7.73
537	-1.72	3.27	1.00	2.86	-.440	4.02	2.23	4.02	2.23	8.37
538	-1.57	2.55	-.08	3.76	-.615	3.78	2.67	3.78	2.67	8.53

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539	-1.67	2.73	-3.46	4.79	-145	6.11	2.15	9.20
540	-.51	3.44	1.64	2.28	.079	3.71	2.17	7.80
541	1.49	3.51	3.79	4.22	.081	4.51	3.17	9.35
542	-2.46	5.34	2.63	8.67	.897	9.70	3.35	16.63
543	-2.15	1.52	3.88	2.45	-.850	4.52	2.73	10.12
544	.36	1.61	1.53	2.34	-.575	2.68	1.64	5.24
545	-3.63	3.16	.51	4.00	-.490	5.25	3.14	10.55
546	.05	3.22	1.31	2.85	.244	3.90	1.75	6.01
547	-.09	3.58	1.24	1.77	.139	3.33	2.24	6.70
548	1.71	2.20	2.77	2.09	.344	4.18	1.16	6.10
549	-.41	2.56	.36	3.40	.140	3.73	1.59	5.80
550	1.50	3.04	-4.48	2.40	-.080	5.65	1.99	8.53
551	1.78	1.78	1.26	1.83	-.195	5.29	1.83	7.44
552	-.67	2.24	4.82	3.78	.593	5.52	3.39	10.32
553	.68	4.35	-.06	1.56	-.036	3.33	3.03	9.45
554	1.01	1.23	-2.15	3.00	.267	3.38	1.98	6.46
555	.80	3.05	-.71	1.53	-.090	3.26	.89	4.34
556	2.67	3.87	-1.20	2.77	-.173	4.76	2.56	8.62
557	.08	1.55	.93	1.71	.287	2.15	1.02	4.07
558	2.54	3.91	-.96	2.33	.300	4.46	2.53	8.72
559	.65	2.58	-.40	2.77	.583	2.87	2.36	7.63
560	1.02	2.65	2.64	2.38	.418	3.80	2.31	8.29
561	-2.93	4.38	-1.55	2.82	.184	5.29	2.78	10.08
562	-1.87	1.26	-1.56	3.50	.357	3.79	2.06	8.36
563	.14	4.06	1.10	5.09	-.496	5.71	2.55	9.46
564	1.92	2.73	2.86	1.47	-.104	4.11	1.98	6.50
565	.01	1.20	1.96	2.26	-.121	2.62	1.75	4.80
566	.16	1.28	-1.84	1.89	-.104	2.47	1.45	5.39
567	-.94	2.47	-.31	3.00	.463	3.23	2.07	7.09
568	.95	1.56	2.35	2.53	-.147	3.42	1.68	5.38
569	-2.82	3.17	1.71	3.16	.180	4.39	1.51	7.27
570	1.86	2.27	.17	1.58	-.229	3.05	.99	4.62
571	-2.05	4.74	.54	3.89	-.318	5.21	3.41	12.24
572	2.42	1.91	.39	4.01	-.877	4.41	2.09	8.31
573	-1.96	2.20	1.19	3.61	-.370	3.87	2.60	7.89
574	1.23	3.22	-.91	3.90	-.659	4.45	2.37	8.93
575	-2.22	3.65	-.99	5.57	-.019	6.12	2.89	11.91
576	2.89	6.08	-2.94	6.33	-.609	8.41	3.96	14.01
577	-2.30	2.92	1.98	5.01	-.518	5.55	2.99	9.24
578	1.89	2.46	-1.09	2.91	-.156	3.80	1.86	7.04
579	1.02	3.66	-3.22	2.59	-.282	4.69	2.82	8.51
580	.67	2.59	-1.59	3.51	-.706	4.01	2.01	7.72
581	-3.35	1.68	2.54	2.35	-.625	4.49	2.34	8.45
582	-1.38	2.67	2.04	4.74	-.275	4.86	3.09	11.47
583	-.64	2.81	-2.55	2.25	.672	3.97	1.68	6.42
584	-.61	2.72	-.14	1.73	.945	2.87	1.19	4.62
585	-1.35	2.84	2.32	1.47	-.299	3.40	2.28	6.60
586	.70	2.31	1.18	2.36	-.148	3.18	1.23	5.09
587	-1.93	3.12	-4.00	5.09	.272	6.08	4.00	11.64
588	2.68	2.38	3.04	2.65	.520	4.36	3.12	8.48
589	-3.20	2.40	-1.99	3.98	.229	5.05	2.95	11.32
590	.86	2.87	1.88	2.67	.569	3.55	2.43	8.04
591	-3.45	3.52	-4.63	5.60	.410	7.32	4.54	15.45
592	-1.87	2.63	-1.22	3.97	.592	4.50	2.30	8.20
593	-.24	2.74	2.89	3.27	.243	4.13	2.88	7.79
594	.22	2.26	-1.19	3.28	.379	3.25	2.34	7.62
595	1.88	1.88	.85	3.43	.591	4.35	1.86	7.41
596	1.27	2.22	.58	1.34	.580	2.51	1.33	5.24
597	.04	1.62	-.59	3.15	-.782	2.84	1.95	6.02
598	.79	2.40	-2.39	2.75	.626	3.73	2.16	6.34

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599	-1.15	1.42	-.93	2.52	2.53	1.88	5.24
600	-2.16	1.30	-.51	2.72	3.43	1.13	5.10
601	-1.59	3.29	.43	2.77	4.08	1.60	7.21
602	-.76	2.38	.19	2.01	2.61	1.61	5.68
603	-.73	2.35	1.37	3.25	3.58	1.61	6.76
604	3.12	4.32	.09	4.54	6.41	1.88	8.67
605	-.20	2.75	.91	3.06	3.67	1.61	6.17
606	2.35	3.67	-2.78	1.19	4.55	2.52	10.68
607	.34	2.78	.31	1.93	3.01	1.15	5.38
608	2.65	4.09	-.21	2.32	4.46	2.73	9.78
609	-.84	1.66	1.14	2.42	2.48	1.97	5.42
610	-1.53	3.22	-.58	1.57	3.33	1.79	5.53
611	1.39	3.09	.76	2.50	3.32	2.45	7.09
612	-1.53	2.94	-.24	2.15	3.31	1.87	7.03
613	-1.01	2.56	-2.73	3.96	4.78	2.41	10.03
614	-.29	2.26	-2.23	2.14	2.77	2.59	7.07
615	-1.29	2.55	.72	4.37	4.49	2.23	9.34
616	.40	2.86	-3.42	3.17	4.26	3.32	11.55
617	-.93	3.01	1.71	1.72	3.23	2.11	6.37
618	1.27	2.46	1.25	3.43	3.54	2.68	7.14
619	-1.93	3.49	-.22	3.06	4.07	2.63	9.12
620	-.64	2.72	-.75	2.71	3.20	2.03	7.03
621	.06	3.17	-1.09	2.15	3.52	1.38	4.91
622	4.05	3.64	-.99	1.36	4.57	3.34	11.07
623	-2.22	3.34	3.21	2.91	4.89	3.12	9.14
624	-1.76	2.68	3.14	3.41	4.98	2.30	8.53
625	-1.16	2.22	1.38	1.03	2.75	1.02	4.27
626	1.56	2.88	-.07	2.49	3.18	2.39	8.00
627	-2.19	2.54	-.40	1.71	3.30	1.63	7.10
628	-1.64	3.01	-.35	2.72	3.58	2.24	6.50
629	-.69	1.79	1.65	2.36	3.05	1.33	4.85
630	1.06	1.98	1.74	4.22	4.50	1.83	8.06
631	-1.79	4.32	-.24	3.94	5.29	2.43	9.03
632	-1.86	7.22	-.89	4.76	5.80	6.41	21.01
633	-1.25	3.79	1.99	2.71	4.76	1.46	6.57
634	4.04	3.82	-2.75	4.79	6.40	4.25	12.41
635	-2.18	2.20	-.19	2.61	3.39	2.00	7.37
636	-1.36	2.12	-.67	1.79	2.66	1.49	5.05
637	.00	2.25	.85	2.15	2.79	1.26	5.04
638	3.66	4.28	-1.77	3.63	5.45	4.05	11.97
639	3.35	3.88	4.70	7.02	8.29	4.88	17.58
640	3.91	3.49	-8.41	7.82	9.94	7.67	21.36
641	-.61	1.44	-.23	2.88	2.88	1.17	5.39
642	-.18	2.68	-1.74	2.49	3.59	1.46	6.41
643	-1.05	1.51	1.43	3.09	3.08	2.14	6.74
644	.14	2.66	1.22	2.58	3.28	1.77	6.36
645	2.70	2.77	3.87	2.84	5.50	2.57	9.22
646	4.16	3.69	3.35	4.66	5.99	5.19	18.25
647	1.55	4.73	2.27	4.80	6.27	3.02	12.30
648	-1.55	3.81	-.50	2.23	4.12	1.77	6.78
649	.09	2.07	1.47	3.85	3.73	2.39	8.00
650	2.22	2.80	-1.49	3.41	4.08	2.93	9.99
651	-.08	2.30	-1.48	2.44	3.22	1.37	4.88
652	-1.48	1.04	2.89	2.98	3.56	2.75	9.32
653	-2.64	2.52	2.75	2.65	5.03	1.06	6.28
654	1.48	2.19	.75	4.52	4.53	2.23	7.05
655	1.43	2.46	-1.89	2.60	3.96	1.15	5.34
656	-.50	2.18	-2.40	3.56	4.23	1.96	7.88
657	-3.60	2.97	2.91	2.54	5.36	2.63	9.07
658	-2.28	1.39	-1.31	1.92	3.12	1.54	5.56

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659	.76	3.59	.26	2.41	.039	3.90	1.43	6.01
660	-.45	2.62	.11	1.88	-.557	2.79	1.32	4.57
661	-2.97	5.00	1.04	3.00	-.852	5.09	3.97	11.14
662	-3.62	4.02	-4.94	2.57	.729	7.07	2.91	12.58
663	-2.62	2.23	.80	1.45	.441	3.26	1.87	6.00
664	1.83	1.52	1.26	2.03	.632	2.67	1.98	6.23
665	1.62	3.62	.22	1.86	.453	3.85	1.64	6.36
666	2.31	1.51	-1.01	2.32	.654	3.41	1.26	5.18
667	-1.33	2.24	1.82	2.05	-.874	3.15	1.92	5.76
668	-1.13	2.18	1.05	1.62	.290	2.71	1.28	4.29
669	5.07	2.42	3.00	2.95	-.740	6.73	1.56	8.68
670	2.88	2.94	.20	2.32	.507	3.98	2.33	7.24
671	1.96	2.85	2.45	2.16	-.300	4.36	1.53	6.86
672	1.25	.84	2.74	1.41	-.275	3.18	1.22	4.66
673	2.11	2.94	.47	2.76	-.290	3.73	2.39	7.00
674	.88	2.81	1.13	4.28	-.351	4.73	1.72	7.31
675	.67	5.36	-.64	2.19	-.835	4.32	3.64	12.63
676	-.03	5.46	-2.25	2.25	-.020	5.23	3.07	10.11
677	-1.66	2.72	.86	3.06	-.668	3.67	2.32	8.47
678	-1.13	3.78	1.63	3.28	-.581	4.82	1.72	7.11
679	1.09	3.44	.88	3.25	.173	4.14	2.25	7.04
680	9.57	5.68	-12.69	12.29	-.964	17.09	11.75	30.51
681	.58	2.65	-.46	2.75	.432	3.21	1.85	6.14
682	-5.61	8.91	.39	5.54	-.965	6.85	9.62	30.44
683	-.75	7.81	-.47	2.03	-.044	6.93	3.32	11.21
684	3.57	4.22	1.61	2.95	.466	5.35	3.37	12.01
685	1.81	6.48	3.67	3.55	.137	6.78	4.60	15.07
686	.60	4.27	-2.33	4.47	-.040	5.77	2.60	9.40
687	-.93	3.90	2.98	1.72	-.612	4.54	2.38	8.55
688	-1.07	3.95	-2.28	3.58	-.386	4.99	2.70	9.36
689	1.35	2.10	2.20	1.83	-.399	3.41	1.45	5.03
690	3.27	3.66	1.28	2.12	-.464	4.85	2.27	7.06
691	.63	2.48	-1.15	2.41	-.166	3.19	1.50	5.64
692	4.31	3.96	-3.37	2.74	-.310	6.63	2.68	9.16
693	-1.28	2.87	1.66	1.39	.513	3.23	1.80	5.94
694	-2.25	3.72	-1.01	3.03	.531	4.49	2.64	8.76
695	.89	1.56	-2.75	3.61	.852	4.20	2.19	8.72
696	9.55	5.83	-.58	3.01	.495	10.10	5.57	17.63
697	.46	5.28	2.57	2.69	-.244	5.45	3.00	11.00
698	5.17	2.97	-.44	5.98	.411	7.28	3.84	13.47
699	-.20	4.12	-.40	2.92	.805	4.51	1.56	6.07
700	7.66	4.92	-5.27	3.93	-.659	9.80	5.36	16.30
701	1.01	2.88	6.20	2.08	-.543	6.85	2.03	11.12
702	.30	6.76	.17	2.36	-.330	5.59	3.97	14.20
703	6.59	5.19	1.14	3.86	.621	7.57	5.24	14.79
704	2.48	4.94	1.92	2.77	.075	5.39	3.18	10.01
705	1.88	3.00	.20	1.97	-.220	3.50	1.71	5.78
706	-9.46	10.87	.92	2.66	-.600	11.79	8.35	23.21
707	2.33	4.55	3.27	3.76	.705	5.88	3.70	12.67
708	3.14	3.75	.86	4.91	-.633	6.27	2.29	10.60
709	-1.96	4.70	4.73	4.90	-.686	6.71	4.97	15.43
710	-3.42	4.36	5.55	2.92	.866	7.94	2.01	10.16
711	3.33	3.57	3.23	5.45	.079	6.10	4.96	13.66
712	3.05	3.92	-2.04	3.73	.348	5.76	2.62	8.11
713	1.30	1.31	1.68	2.06	-.341	3.08	.47	3.66
714	2.32	2.25	.55	1.73	-.005	3.21	1.67	5.05
715	1.30	3.78	1.02	1.20	-.516	3.78	1.61	6.20
716	-.48	2.46	2.37	2.47	.542	3.53	2.14	7.14
717	2.78	2.46	1.01	3.65	.669	4.65	1.83	8.93
718	2.93	3.03	3.23	3.34	.316	4.94	3.76	10.07

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719	-1.16	2.57	1.39	2.25	-1.80	3.06	1.81	5.61
720	-.03	2.26	2.34	2.25	-.633	3.35	1.89	6.18
721	1.80	3.04	2.44	3.37	.870	4.52	2.79	9.00
722	2.94	1.91	.64	4.70	.633	5.18	2.32	7.48
723	.61	3.62	2.11	3.05	.712	3.98	3.14	8.23
724	.56	4.04	-.67	3.65	-.638	4.53	2.65	7.57
725	-.08	3.16	-.76	3.12	.355	3.70	2.17	6.65
726	-3.15	2.71	-2.74	2.62	.600	4.66	3.04	8.80
727	.59	2.40	3.76	3.03	-.579	5.14	1.13	6.69
728	4.04	1.59	.94	4.10	.562	5.51	2.07	8.41
729	2.12	2.90	4.09	3.63	-.146	5.29	3.72	11.28
730	6.21	3.49	2.79	4.17	.810	7.47	4.35	13.76
731	-6.64	4.29	-7.36	6.09	.631	10.40	6.64	21.05
732	-8.48	3.93	-2.58	4.48	.360	9.60	4.48	14.96
733	.35	2.55	.80	3.38	.276	3.56	2.07	7.65
734	2.17	2.42	-2.36	4.08	.156	4.87	2.66	9.23
735	-2.76	4.52	-1.82	3.30	.529	5.06	3.82	11.18
736	-1.04	2.81	.39	3.50	-.195	4.19	1.22	6.14
737	-2.00	2.92	.65	1.10	.539	3.28	1.58	6.05
738	1.76	2.32	2.56	3.71	.031	4.58	2.47	7.95
739	-1.01	1.96	.46	1.71	-.506	2.50	1.04	3.65
740	-.45	1.87	-2.39	2.57	.295	3.74	.95	4.89
741	-.22	1.08	1.49	1.67	.363	2.01	1.40	4.21
742	1.73	1.87	.30	2.08	-.350	2.91	1.27	4.47
743	.85	4.37	3.84	1.98	-.420	5.79	1.54	8.10
744	2.30	1.98	1.53	2.50	.504	3.81	1.52	7.12
745	2.13	1.79	2.21	3.24	-.225	4.37	1.62	6.84
746	1.15	2.23	-1.99	2.33	.531	3.52	1.50	5.84
747	1.57	5.32	-5.25	3.26	.652	7.14	3.87	13.42
748	3.51	6.97	-3.40	3.29	-.340	6.67	4.82	15.02
749	7.79	5.28	-11.29	9.71	-.599	14.44	9.96	28.29
750	-10.16	7.32	5.01	9.15	-.515	13.99	7.77	21.72
751	-.15	3.65	-.80	3.47	-.384	4.05	2.71	8.39
752	.75	2.78	.47	3.36	-.695	3.76	1.94	7.31
753	-1.11	2.22	2.07	2.48	-.042	3.38	2.08	7.64
754	-.33	2.72	1.48	3.86	-.416	4.15	2.29	7.39
755	-1.09	2.38	1.79	2.49	-.746	3.41	1.88	6.80
756	-2.38	5.13	-3.80	4.44	.751	6.75	4.10	12.09
757	16.87	3.79	-4.32	3.91	-.338	17.69	4.32	22.64
758	-.30	3.48	.66	3.00	.156	3.81	2.28	7.38
759	-5.23	3.15	-7.17	6.04	.395	9.46	5.86	21.91
760	4.67	7.96	11.24	5.39	.446	13.64	7.01	24.57
761	-1.04	2.34	5.49	4.43	.112	6.27	3.99	14.00
762	4.35	2.16	.49	4.99	.517	6.21	2.73	11.31
763	-3.17	3.05	-3.05	4.38	-.840	6.12	2.76	10.48
764	-.73	2.08	-1.70	3.13	.277	3.67	1.66	6.33
765	1.69	2.30	.92	2.29	-.436	3.16	1.84	6.52
766	2.25	2.58	-1.10	2.22	.427	3.69	1.35	5.62
767	-2.02	3.69	-.93	2.88	.381	4.74	1.38	6.58
768	-1.23	2.21	-.43	2.44	-.114	3.27	.73	4.09
769	.15	2.43	2.35	3.14	-.153	3.81	2.34	8.53
770	-1.95	2.90	-1.17	3.04	.036	3.77	2.71	8.00
771	-2.09	3.09	-7.23	6.44	.364	8.35	6.01	17.56
772	2.68	3.04	-1.10	2.15	.318	4.01	2.26	7.23
773	-.28	2.16	.14	2.05	.407	2.40	1.54	4.25
774	1.68	1.76	.41	3.23	.338	3.45	1.84	6.66
775	1.80	4.96	.26	2.45	.168	5.01	2.38	7.94
776	2.79	2.81	2.58	1.65	.814	4.12	2.78	7.94
777	-2.45	5.43	-6.91	7.68	.238	10.40	5.14	17.17
778	.33	5.32	-8.71	4.02	.587	10.29	3.18	14.01

SANTA MONICA 6HR WIND CHANGE 9-16 KM SUMMER

779	- .02	4.27	1.68	2.37	- .433	4.47	2.07	7.37
780	- .43	4.68	- .65	4.21	- .064	5.69	1.81	9.01
781	- .67	1.70	- .24	1.66	- .170	2.07	1.15	4.26
782	- 8.80	6.48	.51	3.13	- .103	9.43	6.25	20.00
783	- 4.54	1.80	- 2.52	1.63	- .602	5.30	2.15	7.96
784	2.30	3.02	- .68	3.27	- .861	4.18	2.53	7.76
785	3.27	1.96	- 1.00	2.87	- .011	4.11	2.47	8.48
786	4.88	2.10	- .36	2.50	- .497	5.34	2.33	8.01
787	- 1.21	1.37	1.62	2.32	- .162	2.94	1.42	5.36
788	1.19	1.80	3.98	2.64	- .091	4.62	2.35	9.15
789	1.89	4.44	2.49	2.25	- .448	4.77	3.15	9.44
790	3.42	2.38	4.88	4.20	- .314	6.46	4.02	12.17
791	- 4.44	4.03	2.35	3.06	- .426	6.06	3.54	11.01
792	.15	3.14	3.95	3.13	- .313	6.25	4.29	12.69
793	- .61	3.33	- 1.49	2.34	- .406	7.83	2.42	7.83
794	2.62	1.98	- .69	2.87	- .645	4.04	1.39	5.43
795	- .26	2.34	1.02	4.60	- .385	4.65	1.77	6.82
796	- 1.44	1.37	- .70	2.09	- .503	2.58	1.25	4.70
797	2.58	3.82	2.55	3.01	- .767	5.26	2.67	9.00
798	- .86	2.80	- 3.42	3.48	- .368	4.87	2.66	8.70
799	- 2.37	5.31	- 2.97	2.17	- .422	5.10	4.43	12.79
800	- 1.91	3.69	- .14	2.59	- .274	3.79	2.84	10.16
801	.46	3.06	1.08	1.66	- .525	3.26	1.24	5.04
802	4.53	2.58	.82	3.76	- .490	5.81	2.54	9.00
803	2.32	5.61	3.35	1.72	- .547	5.51	4.33	14.18
804	4.06	2.15	2.56	1.05	- .422	4.91	2.12	8.02
805	- 3.43	2.10	- .33	2.26	- .153	4.16	1.81	7.04
806	1.33	2.28	- 1.25	1.47	- .434	2.81	1.47	5.53
807	- .45	2.36	- 3.60	2.63	- .721	4.50	2.08	7.20
808	- 1.39	2.82	- .33	3.45	- .430	4.08	1.77	6.37
809	- 1.37	2.50	.35	2.61	- .488	3.28	1.76	5.57
810	1.31	1.30	5.36	2.41	- .600	5.83	1.86	7.57
811	- .72	2.64	.93	1.87	- .023	2.96	1.42	5.37
812	- 2.60	3.37	.36	2.16	- .319	4.23	1.85	7.77
813	- 1.09	3.72	.61	3.73	- .048	4.65	2.20	8.64
814	3.30	2.12	1.14	1.66	- .136	3.90	1.95	6.34
815	.85	2.89	.82	3.70	- .498	4.18	1.91	6.52
816	3.11	2.83	1.44	2.70	- .201	4.22	2.89	9.54
817	1.47	2.36	3.50	2.39	- .708	4.01	3.06	10.08
818	5.88	4.74	1.07	4.04	- .761	7.51	3.90	13.70
819	- .10	2.04	- 1.50	1.80	- .151	2.54	1.60	4.58
820	- 1.76	1.41	- .30	2.02	- .001	2.65	1.29	4.68
821	- 2.64	4.36	1.17	2.84	- .920	5.40	1.83	8.80
822	- 2.11	1.58	- 1.45	2.57	- .229	3.48	1.66	6.32
823	1.72	3.42	1.52	2.27	- .109	4.02	2.10	8.45
824	2.65	1.40	- .97	1.84	- .630	3.42	1.02	5.14
825	2.26	1.74	1.32	1.77	- .024	3.24	1.40	5.17
826	.03	2.78	.64	1.40	- .364	2.63	1.51	5.24
827	.28	2.69	- .45	1.99	- .021	3.07	.89	4.05
828	2.96	3.09	1.78	3.97	- .307	5.01	3.20	10.23
829	2.51	4.61	1.51	2.60	- .148	5.42	2.04	9.39
830	3.72	3.00	7.33	2.79	- .520	8.86	2.07	11.44
831	- 3.31	3.99	3.55	4.53	- .759	7.22	1.95	10.73
832	- 2.10	1.99	4.61	3.00	- .565	5.76	2.09	8.75
833	- 3.23	1.39	- 1.77	1.62	- .100	3.99	1.39	5.39
834	.68	2.52	- 2.15	3.15	- .364	3.86	2.26	7.00
835	- 4.87	2.56	- 2.74	4.35	- .091	7.01	2.23	9.48
836	- 2.41	5.02	- .50	2.29	- .052	5.20	2.53	9.89
837	- .66	4.00	- .56	1.66	- .123	3.57	2.24	8.05
938	4.50	3.15	.84	2.08	- .035	5.22	2.66	9.36

ORIGINAL PAGE IS
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SANTA MONICA 6HR WIND CHANGE 9-16 KM SUMMER

839	-1.09	2.35	-3.64	6.35	-520	5.75	4.95	13.97
840	2.45	3.00	-1.32	2.37	-186	4.15	1.93	7.40
841	1.38	3.79	-1.86	1.61	-621	5.08	2.05	7.08
842	-2.18	2.42	-1.57	4.00	-267	6.26	.75	6.09
843	.01	2.24	4.83	4.36	-334	4.51	2.44	8.64
844	1.67	2.50	3.24	2.41	-374	4.82	1.99	6.84
845	2.43	6.35	5.41	5.32	-381	8.65	4.82	14.10
846	-4.09	2.96	3.23	4.23	-104	3.72	3.72	12.33
847	4.26	3.69	-6.18	5.60	-786	7.93	6.13	19.46
848	4.21	2.20	-11.76	10.12	-322	13.29	9.14	27.65
849	1.64	4.76	1.32	2.84	-342	5.42	1.51	8.07
850	1.71	1.13	3.63	3.62	-110	5.03	1.95	8.21
851	-4.70	1.88	-64	1.37	-189	4.91	1.89	6.72
852	-2.30	2.29	.76	2.07	-290	3.08	2.31	7.68
853	.21	2.84	-36	3.48	-341	3.74	2.09	7.00
854	1.84	2.56	-82	3.81	-150	4.38	1.95	7.18
855	-92	3.19	1.79	5.30	-548	4.49	4.47	14.88
856	3.30	2.60	-06	3.14	-276	4.45	2.54	8.18
857	-37	4.30	-2.08	6.34	-758	6.54	3.86	14.34
858	-3.11	2.71	-1.22	5.21	-311	6.15	1.98	9.64
859	-3.25	3.50	.74	2.18	-175	4.10	3.24	9.85
860	-1.59	2.16	-74	1.87	-790	3.00	1.20	5.11
861	.42	2.82	3.78	1.82	-040	4.72	1.52	7.00
862	.90	2.00	-2.38	2.33	-228	3.51	1.65	6.34
863	-19	4.97	.22	4.77	-123	6.29	1.50	9.01
864	-1.56	2.21	1.00	4.00	-226	4.30	1.91	6.80
865	.37	1.68	-1.16	2.87	-559	2.50	1.15	5.02
866	.12	1.76	-2.89	2.32	-440	3.03	1.54	5.81
867	3.57	4.02	-1.78	2.86	-073	5.63	3.08	10.12
868	-08	2.95	3.69	1.55	-314	3.85	1.88	7.45
869	-50	2.76	2.14	2.27	-257	4.41	1.91	7.69
870	2.14	2.66	-2.41	2.70	-519	4.29	1.30	6.34
871	-4.15	4.04	2.96	2.70	-391	5.61	3.74	12.08
872	-2.69	2.92	-2.21	3.33	-037	5.48	1.90	8.19
873	-1.96	5.18	-1.53	6.06	-383	7.00	4.19	13.87
874	1.04	3.27	3.34	5.71	-347	5.12	4.15	12.09
875	-9.28	4.96	1.14	2.35	-787	9.98	5.25	20.41
876	-1.01	6.23	8.67	9.30	-093	5.70	3.85	13.44
877	2.90	2.84	-2.64	10.42	-179	10.27	8.35	25.59
878	5.94	3.95	3.25	1.94	-323	5.45	2.30	23.03
879	2.54	4.00	-80	2.03	-304	4.12	3.05	8.08
880	3.73	2.82			-590			

MEAN DU(M/S) = .02
 MEAN DV(M/S) = .09
 SD DU(M/S) = 4.06
 SD DV(M/S) = 4.18
 R(DU,DV) = .08
 MEAN W(M/S) = 4.73
 SD W(M/S) = 3.40
 SD MEAN(M/S) = 2.10
 MEAN MAXW(M/S) = 8.78
 SD MAXW(M/S) = 4.12

KSC , UNFILTERED		, WINTER 3HR WIND CHANGE 3-9KM		V-COMPONENT CHANGE		VECTOR WIND CHANGE		MAX
NP	MEAN	STD. DEV.	MEAN	STD. DEV.	R	MEAN	STD. DEV.	
1	-.08	2.14	.05	1.19	-.301	2.18	1.09	4.99
2	1.89	1.79	1.76	2.19	-.463	3.01	1.58	8.14
3	3.85	1.96	1.76	2.19	-.228	4.80	1.86	9.56
4	-.06	1.74	.44	1.67	-.134	2.16	1.16	4.75
5	1.06	2.64	12.13	3.51	-.208	12.49	3.38	19.14
6	2.34	3.02	2.73	2.87	-.094	4.91	2.47	9.47
7	-1.35	5.30	-7.75	4.27	.067	9.40	4.44	16.18
8	.19	1.51	-.65	2.88	.008	3.04	1.31	5.83
9	.28	2.14	1.63	1.08	-.162	2.58	1.33	6.24
10	-.64	1.67	-2.24	3.71	.094	3.91	2.57	10.53
11	-.62	1.84	1.30	1.66	.553	2.37	1.61	6.59
12	-.21	2.98	-3.25	4.64	.295	5.39	3.44	14.21
13	-1.65	3.46	1.11	4.36	-.313	4.84	3.38	12.67
14	-7.26	4.90	-.53	2.70	.538	8.05	4.41	12.97
15	-2.73	3.70	-.60	4.59	-.392	6.07	2.37	11.32
16	-1.54	2.78	-.81	3.25	-.401	3.42	3.09	14.07
17	-2.35	3.12	-.46	3.85	.067	4.55	3.09	11.59
18	-1.05	2.28	-.26	1.78	.357	2.50	1.80	6.99
19	.43	1.31	-2.06	1.95	-.047	2.77	1.50	6.73
20	.16	2.31	-.14	1.87	.088	2.70	1.24	5.44
21	.04	1.25	-.90	1.45	-.186	1.95	.81	4.35
22	-.78	1.11	-.52	1.56	.002	1.90	.96	4.40
23	-.63	3.66	-.99	2.66	-.531	4.36	1.68	8.22
24	-.40	3.21	-4.58	3.30	.218	5.62	3.28	13.02
25	-1.77	2.20	-.88	1.42	-.441	2.64	1.95	7.16
26	-.63	.85	-1.32	2.53	-.403	2.66	1.48	7.48
27	.91	3.78	-1.27	4.34	-.548	5.28	2.75	12.60
28	-.15	3.98	1.10	3.94	-.124	5.21	2.31	10.17
29	.43	3.03	4.24	4.55	.482	6.05	3.38	12.03
30	2.32	1.31	-.68	2.62	-.103	3.49	1.49	6.76
31	-1.36	4.54	-6.71	6.21	.589	9.00	4.99	15.81
32	-1.33	2.57	.48	4.23	.151	4.72	2.04	9.60
33	6.45	3.05	-2.11	2.69	-.318	7.39	2.82	11.48
34	3.12	1.94	1.58	2.24	-.428	4.33	1.52	7.15
35	1.93	1.74	3.03	2.90	-.159	4.60	1.77	7.87
36	.04	3.27	2.10	3.41	-.500	4.48	2.57	10.35
37	2.38	2.04	-1.80	3.09	.218	4.14	2.34	10.78
38	.93	2.70	.09	2.79	-.694	3.69	1.51	6.17
39	1.97	3.62	1.96	2.52	-.071	4.47	2.67	15.20
40	4.11	1.92	4.12	2.33	-.631	6.41	1.36	9.00
41	.85	1.95	1.22	2.47	-.557	3.10	1.56	6.50
42	1.63	1.69	3.40	1.41	.242	4.07	1.57	7.16
43	-5.70	5.68	1.00	10.53	-.961	12.83	3.38	18.04
44	.71	1.57	-2.21	2.47	-.429	3.09	2.09	8.38
45	-2.20	1.43	2.32	1.07	-.163	3.43	1.26	6.51
46	.25	3.04	1.32	2.50	.070	3.78	1.71	7.60
47	-.09	1.70	.63	2.33	-.076	2.53	1.53	8.06
48	-.40	1.67	2.32	2.30	-.362	3.36	1.53	6.52
49	1.90	2.12	-2.05	2.15	-.287	3.58	2.02	7.57
50	1.96	2.32	2.62	2.32	-.014	4.22	1.91	7.99
51	-1.37	1.53	1.73	1.43	.357	2.86	1.03	4.92
52	.25	2.59	-.47	1.77	.022	2.86	1.38	5.88
53	-1.31	1.49	-.94	2.52	-.396	3.02	1.41	5.97
54	-2.56	2.00	-1.03	2.50	-.598	3.59	2.22	11.75
55	.01	3.62	-7.25	6.89	-.470	8.98	5.68	20.29
56	.20	2.92	.46	3.66	-.200	4.06	2.37	10.89
57	-6.42	4.07	-2.01	2.63	-.761	7.33	3.86	13.38
58	-1.56	2.22	3.00	2.32	-.082	4.32	1.74	7.61

ORIGINAL PAGE IS
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59	4.39	5.11	.42	7.78	.701	9.62	3.63	14.66
60	-1.18	1.99	1.30	1.68	-.365	2.57	1.38	5.43
61	-5.57	4.25	-4.94	3.85	.225	8.52	3.96	16.75
62	-4.97	4.74	-1.31	2.79	-.039	6.64	3.54	13.86
63	-1.36	1.72	1.43	3.36	.140	3.97	1.52	6.97
64	-.66	1.98	.21	1.79	.417	2.51	1.13	5.06
65	3.45	3.94	3.40	2.54	.755	5.62	3.72	16.35

MEAN DU(M/S) = .16
 MEAN DV(M/S) = .13
 SD DU(M/S) = 3.76
 SD DV(M/S) = 4.43
 R(DU,DV) = .02
 MEAN W(M/S) = 4.68
 SD W(M/S) = 3.46
 SD MEAN(M/S) = 2.41
 MEAN MAXW(M/S) = 9.71
 SD MAXW(M/S) = 3.97

ORIGINAL PAGE IS
OF POOR QUALITY

NP	WT	GT	500M	U-COMPONENT CHANGE			V-COMPONENT CHANGE			VECTOR WIND CHANGE			MAX
				MEAN	STD.DEV.	R	MEAN	STD.DEV.	R	MEAN	STD.DEV.	R	
1				-.09	2.13	.05	1.17	1.17	.302	2.17	1.09	.302	4.85
2				1.89	1.78	.17	2.20	2.20	-.489	2.99	1.61	-.489	8.77
3				3.86	1.96	1.77	2.20	2.20	-.236	4.81	1.87	-.236	9.28
4				-.05	1.75	.44	1.66	1.66	-.132	2.15	1.17	-.132	4.62
5				1.06	2.64	12.13	3.52	3.52	-.206	12.49	3.39	-.206	19.20
6				2.35	3.02	2.73	2.89	2.89	.066	9.40	4.46	.066	15.86
7				-1.34	5.31	-7.76	4.27	4.27	.025	3.04	1.26	.025	5.25
8				.19	1.49	1.63	2.86	2.86	-.184	2.58	1.34	-.184	6.46
9				.27	2.15	1.05	3.71	3.71	.094	3.91	2.57	.094	10.26
10				-.64	1.67	-2.23	1.64	1.64	.566	2.35	1.61	.566	6.42
11				-.63	1.84	1.29	4.65	4.65	.290	5.38	3.48	.290	14.25
12				-.20	2.98	-3.27	4.41	4.41	-.319	4.87	3.41	-.319	12.58
13				-1.65	3.47	1.11	2.71	2.71	.541	8.06	4.42	.541	13.08
14				-7.27	4.90	-.53	4.58	4.58	-.392	6.08	2.36	-.392	11.49
15				-2.74	3.71	-.81	3.26	3.26	-.403	3.41	3.11	-.403	14.33
16				-1.54	2.77	-.46	3.86	3.86	.077	4.55	3.08	.077	11.74
17				-2.35	3.11	-.26	1.77	1.77	.043	2.49	1.81	.043	6.83
18				-1.05	1.31	-2.06	1.91	1.91	.082	2.77	1.47	.082	6.85
19				.43	2.31	-.14	1.85	1.85	.155	2.69	1.24	.155	5.32
20				.17	1.21	.91	1.42	1.42	.191	1.92	.80	.191	4.22
21				.04	1.09	-.51	1.56	1.56	.009	4.37	1.69	.009	4.31
22				-.78	3.68	-.99	2.66	2.66	-.531	5.63	3.29	-.531	7.77
23				-.63	3.25	-4.59	3.28	3.28	.221	5.30	1.95	.221	12.51
24				-.40	3.25	.88	1.42	1.42	-.440	2.63	1.95	-.440	7.03
25				-1.78	2.19	-.131	2.52	2.52	-.438	2.63	1.47	-.438	7.12
26				-.64	3.78	-1.27	4.36	4.36	-.554	5.23	2.75	-.554	12.48
27				.92	3.99	1.11	3.96	3.96	-.116	6.05	2.33	-.116	10.04
28				-.15	3.01	4.24	4.57	4.57	.483	3.48	3.38	.483	12.03
29				.44	1.27	-.68	2.62	2.62	-.081	9.01	5.01	-.081	6.90
30				2.32	4.54	-6.71	6.24	6.24	.590	4.73	2.04	.590	16.03
31				-1.36	2.57	.48	4.24	4.24	.151	4.33	2.83	.151	9.57
32				-1.33	3.04	-2.12	2.65	2.65	-.310	4.73	2.83	-.310	11.53
33				6.45	1.95	1.59	2.23	2.23	.430	4.33	1.50	.430	7.20
34				3.12	1.95	3.02	2.89	2.89	-.158	4.58	1.77	-.158	10.39
35				1.93	1.71	2.11	3.40	3.40	-.502	4.48	2.58	-.502	10.64
36				.04	3.28	-1.80	3.10	3.10	-.228	4.14	2.34	-.228	6.14
37				2.39	2.03	-.09	2.78	2.78	-.702	3.67	1.48	-.702	14.22
38				.92	2.68	1.97	2.48	2.48	-.083	4.47	2.57	-.083	8.89
39				1.96	3.57	4.11	2.33	2.33	-.638	6.41	1.35	-.638	6.46
40				4.11	1.91	1.22	2.46	2.46	-.565	3.10	1.55	-.565	6.69
41				.85	1.94	3.40	1.37	1.37	.249	4.05	1.55	.249	17.76
42				1.63	1.66	1.01	10.54	10.54	-.964	12.84	3.35	-.964	6.06
43				-5.70	5.65	-2.21	2.44	2.44	-.415	3.05	2.06	-.415	8.05
44				.71	1.49	2.31	1.04	1.04	.161	3.42	1.25	.161	6.44
45				-2.20	1.42	1.32	2.52	2.52	.069	3.79	1.72	.069	7.58
46				.24	3.05	1.68	2.32	2.32	-.114	2.49	1.53	-.114	7.83
47				-10	1.68	2.33	2.30	2.30	-.371	3.37	1.49	-.371	6.14
48				-.40	1.66	-2.05	2.17	2.17	-.296	3.61	2.02	-.296	7.61
49				1.89	2.14	2.62	2.32	2.32	-.010	4.22	1.92	-.010	7.94
50				1.97	2.32	1.73	1.42	1.42	.357	2.86	1.00	.357	4.93
51				-1.37	1.52	1.52	1.77	1.77	.020	2.85	1.41	.020	6.06
52				.25	2.59	-.94	1.77	1.77	-.404	3.00	1.40	-.404	5.84
53				-1.31	1.47	-1.03	2.50	2.50	.610	3.60	2.17	.610	11.84
54				-2.56	1.97	-7.25	2.48	2.48	-.471	3.60	5.71	-.471	20.20
55				.00	3.63	-.45	6.93	6.93	-.198	9.00	4.08	-.198	10.85
56				.19	2.94	-2.01	3.69	3.69	.769	7.34	3.89	.769	13.29
57				-6.43	4.09	3.01	2.64	2.64	-.081	4.29	1.78	-.081	7.52
58				1.56	2.21		2.29	2.29		4.29			

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KSC WL GT 500M WINTER 3HR WIND CHANGE 3-9KM

59	4.40	5.12	.42	7.81	9.64	3.68	14.59
60	1.18	1.98	1.30	1.66	2.56	1.35	5.60
61	-5.56	4.30	-4.94	3.87	8.53	3.99	16.78
62	-4.96	4.75	-1.30	2.81	6.66	3.52	13.47
63	-1.36	1.70	1.43	3.34	3.96	1.48	7.04
64	-.66	1.98	.22	1.78	2.50	1.14	4.94
65	3.46	3.95	3.39	2.53	5.61	3.73	16.17

MFAN DU(M/S) = -.16
 MFAN DV(M/S) = .13
 SD DU(M/S) = 3.76
 SD DV(M/S) = 4.44
 R(DU, DV) = .02
 MEAN W(M/S) = 4.68
 SD W(M/S) = 3.47
 SD MEAN(M/S) = 2.41
 MEAN MAXW(M/S) = 9.62
 SD MAXW(M/S) = 3.96

KSC WL GT 1500M WINTER 3HR WIND CHANGE 3-9KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-1.10	2.00	1.04	1.03	.334	2.00	1.03	4.53
2	1.93	1.57	1.74	1.74	-.547	2.78	1.24	7.51
3	3.88	1.60	1.77	1.77	-.075	4.62	1.52	7.30
4	-1.12	1.43	1.55	1.55	-.147	1.96	.90	3.75
5	1.08	2.43	3.39	3.39	-.189	12.36	3.29	18.10
6	2.33	2.79	2.48	2.48	-.053	4.61	2.35	8.34
7	-1.28	5.10	3.90	3.90	.035	9.08	4.45	14.87
8	.19	1.11	2.73	2.73	.040	2.80	1.16	5.07
9	.21	1.85	.67	.67	-.175	2.32	1.09	5.18
10	-.60	1.42	3.28	3.28	.130	3.51	2.37	9.76
11	-.62	1.67	1.37	1.37	.676	2.28	1.28	5.17
12	-.25	2.77	4.25	4.25	.407	5.04	3.29	12.71
13	-1.60	3.29	4.14	4.14	-.412	3.09	3.09	11.66
14	-7.18	4.76	2.55	2.55	.586	7.90	4.30	12.87
15	-2.69	3.52	4.00	4.00	-.374	5.50	2.36	10.04
16	-1.56	2.69	3.35	3.35	-.440	3.26	3.27	15.19
17	-2.24	2.77	3.32	3.32	.168	4.08	2.67	9.06
18	-1.03	2.12	1.52	1.52	.352	2.27	1.65	6.31
19	.44	1.09	1.38	1.38	-.302	2.54	1.10	4.97
20	.17	2.15	1.31	1.31	.066	2.32	.97	4.58
21	.03	.96	1.14	1.14	.048	1.63	.60	2.76
22	-.75	.98	1.38	1.38	.011	1.70	.88	3.45
23	-.60	3.49	2.35	2.35	-.602	4.04	1.64	7.66
24	-.33	2.95	3.10	3.10	-.263	5.45	3.06	11.19
25	-1.77	2.06	1.35	1.35	-.490	2.49	1.95	6.06
26	-.66	.54	2.17	2.17	-.400	2.29	1.32	5.73
27	.96	3.59	4.18	4.18	-.547	5.18	2.44	11.51
28	-.13	3.68	3.78	3.78	-.101	5.04	1.88	8.70
29	.40	2.74	4.37	4.37	.567	5.78	3.26	11.13
30	2.27	.76	2.27	2.27	.042	3.14	1.21	5.87
31	-1.40	4.21	6.05	6.05	.600	8.73	4.86	15.75
32	-1.30	2.34	4.07	4.07	.130	4.44	2.05	8.14
33	6.44	2.90	2.34	2.34	-.291	7.21	2.83	10.83
34	3.08	1.66	2.01	2.01	-.346	4.20	1.08	6.92
35	1.92	1.34	2.21	2.21	-.066	4.18	1.59	6.41
36	-.03	3.10	3.24	3.24	-.487	4.32	2.46	12.80
37	2.35	1.72	2.77	2.77	.397	3.95	1.93	8.76
38	.98	2.39	2.53	2.53	-.804	3.29	1.48	5.22
39	1.96	3.03	1.90	1.90	-.017	3.99	2.14	9.04
40	4.16	1.73	2.13	2.13	-.681	6.36	1.21	7.79
41	.83	1.58	2.27	2.27	-.643	2.81	1.41	6.02
42	1.59	1.28	1.11	1.11	-.597	3.88	1.41	6.21
43	-5.71	5.33	10.18	10.18	-.975	12.47	3.14	16.72
44	.70	1.18	2.09	2.09	-.463	2.74	1.78	5.71
45	-2.15	1.07	.84	.84	.126	3.32	.90	4.76
46	.23	2.85	1.94	1.94	.176	3.33	1.57	6.23
47	-.09	1.49	2.22	2.22	-.250	2.25	1.59	6.67
48	-.37	1.57	2.07	2.07	-.470	3.21	1.31	5.31
49	1.88	1.93	2.06	2.06	-.297	3.38	2.07	7.06
50	1.93	2.20	1.98	1.98	.150	4.04	1.78	7.17
51	-1.35	1.41	1.26	1.26	.362	2.73	.92	4.52
52	.24	2.01	1.57	1.57	-.024	2.35	1.13	4.93
53	-1.35	1.29	2.16	2.16	-.479	2.70	1.30	4.70
54	-2.54	1.56	2.14	2.14	.658	3.48	1.40	7.99
55	-.03	3.43	6.33	6.33	-.493	8.77	5.30	19.13
56	-.19	2.58	3.41	3.41	-.321	3.73	2.13	8.90
57	-6.39	3.74	2.29	2.29	.761	7.14	3.57	11.95
58	-1.45	1.99	2.00	2.00	.019	4.06	1.72	7.33

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KSC WE GT THOUM WINTER JHR WIND CHANGE J JHR

59	4.41	4.87	.40	7.48	-.751	9.26	3.64	14.72
60	-.17	1.65	1.38	1.22	-.252	2.28	.97	3.95
61	-5.53	4.00	-4.93	3.57	.223	8.33	3.76	14.73
62	-4.95	4.49	-1.29	2.63	-.056	6.45	3.40	12.15
63	-1.34	1.50	1.46	3.17	.199	3.77	1.41	6.56
64	-.63	1.88	.22	1.63	.454	2.36	1.01	4.86
65	3.36	3.61	3.39	2.28	.789	5.45	3.36	13.52

MEAN DU(M/S) = .16
 MEAN DV(M/S) = .14
 SD DU(M/S) = 3.58
 SD DV(M/S) = 4.23
 R(DU,DV) = .03
 MEAN W(M/S) = 4.42
 SD W(M/S) = 3.34
 MEAN MAXW(M/S) = 2.41
 SD MAXW(M/S) = 3.91

KSC ,WL GT 3000M ,WINTER 3HR WIND CHAN: 3.9KM			U-COMPONENT CHANGE			V-COMPONENT CHANGE			VECTOR WIND CHANGE			R	MAX		
NP	MEAN	STD. DEV.	MEAN	STD. DEV.	MEAN	STD. DEV.	STD. DEV.	MEAN	STD. DEV.	STD. DEV.	MAX		MEAN	STD. DEV.	MAX
1	-.02	1.84	.08	.66	.209	1.80	.76	3.32							
2	2.00	1.25	.26	1.12	-.781	2.42	1.00	5.66							
3	3.75	1.06	1.63	.91	-.050	4.24	.88	5.34							
4	-.10	.95	.42	1.40	.010	1.62	.63	2.50							
5	.92	2.53	11.89	2.87	-.154	12.23	2.71	16.07							
6	2.17	2.11	2.62	1.48	.202	3.81	1.92	6.83							
7	-1.45	4.83	-7.68	3.58	.052	8.97	4.09	14.49							
8	.13	.63	.87	2.03	-.116	2.17	.76	4.42							
9	.14	1.18	1.62	.41	.107	1.93	.67	3.44							
10	-.65	1.02	-2.37	3.20	.401	3.24	2.62	10.91							
11	-.47	1.21	1.29	.96	.849	1.92	.76	3.77							
12	-.43	2.39	-3.00	3.61	.612	4.65	2.50	9.45							
13	-1.73	2.34	1.22	3.03	-.307	3.57	2.51	8.60							
14	-7.02	4.41	-.40	2.36	.607	7.68	3.93	11.64							
15	-2.52	2.97	-.50	3.66	-.368	5.16	1.46	7.77							
16	-1.51	2.67	-.40	3.07	-.561	3.37	2.76	10.51							
17	-2.08	1.90	.35	2.88	.224	3.75	1.52	5.99							
18	-1.03	1.75	-.17	1.08	.299	1.96	1.19	4.48							
19	.37	.94	-1.94	1.04	-.863	2.29	.78	3.45							
20	.09	1.91	-.15	.68	.162	1.88	.77	3.33							
21	.07	.91	.74	.88	-.197	1.45	.25	1.86							
22	-.81	.54	-.62	1.09	-.390	1.50	.51	2.56							
23	-.72	2.82	-1.09	1.90	-.868	3.44	1.17	5.09							
24	-.41	1.62	-4.61	2.72	.324	4.83	2.84	8.17							
25	-1.72	1.85	.97	1.10	-.859	2.18	1.93	5.23							
26	-.56	.35	-1.28	1.48	-.098	1.92	.76	3.30							
27	.93	3.10	-1.25	3.82	-.652	4.80	1.89	8.52							
28	.06	2.27	1.18	3.25	-.636	3.81	1.62	5.84							
29	.32	2.70	4.30	4.01	.321	5.57	3.29	10.75							
30	2.27	.55	-.68	1.45	.170	2.77	.55	4.10							
31	-1.46	3.90	-6.54	5.45	.648	8.24	4.66	14.50							
32	-1.33	1.62	.35	3.31	.075	3.75	1.17	6.13							
33	6.37	2.78	-2.02	1.88	-.388	6.97	2.73	10.65							
34	2.39	.98	1.49	1.81	-.479	3.84	.81	5.32							
35	1.76	.89	3.13	1.83	-.004	3.89	1.36	5.76							
36	-.15	2.70	2.26	2.94	-.550	3.85	2.50	10.90							
37	2.22	1.32	-1.82	2.08	.632	3.59	1.18	5.48							
38	.92	2.20	.16	2.38	-.932	3.02	1.50	6.38							
39	2.12	2.11	2.05	1.67	.037	3.69	1.50	6.77							
40	4.10	1.07	4.14	1.90	-.636	6.13	1.07	7.55							
41	.69	1.18	1.32	2.09	-.816	2.44	1.42	6.52							
42	1.70	1.18	3.39	1.00	.759	3.89	1.28	6.03							
43	-5.53	5.39	.97	9.88	-.977	12.22	2.92	15.23							
44	.67	1.06	-2.06	1.89	-.628	2.63	1.56	4.92							
45	-2.10	.98	2.29	.48	.520	3.24	.59	4.27							
46	.18	2.41	1.33	1.61	-.204	2.76	1.60	7.35							
47	.03	.89	.69	1.51	-.017	1.58	1.03	4.69							
48	-.30	1.40	2.16	1.66	-.522	2.72	1.43	5.24							
49	1.75	1.91	-2.20	1.63	-.276	3.22	1.97	6.14							
50	1.89	1.76	2.43	1.98	.001	3.77	1.48	5.49							
51	-1.40	.98	1.65	1.26	-.749	2.58	.75	4.07							
52	.25	1.33	-.63	.93	.191	1.64	.61	3.18							
53	-1.35	1.10	-.91	1.77	-.593	2.50	.84	3.80							
54	-2.54	1.45	-.69	1.31	.533	3.11	1.01	5.76							
55	-.16	2.80	-7.34	4.90	-.758	8.10	4.47	16.30							
56	.04	2.03	.37	2.22	-.006	2.66	1.45	5.03							
57	-6.27	3.15	-1.89	1.63	.781	6.71	3.22	12.00							
58	-1.54	1.69	2.91	1.76	.300	3.84	1.44	6.55							

KSC	WL	GT	3000M	WINTER	3HR	WIND	CHANGE	3-9KM
59	'	4.10	4.68	.28	7.79	-.655	9.19	3.84
60		-.18	1.01	1.44	.78	-.411	1.81	.68
61		-5.60	2.55	-4.85	2.56	.536	7.60	3.19
62		-4.86	4.11	-1.25	2.31	.091	6.01	3.35
63		-1.41	1.49	1.49	3.06	.124	3.61	1.40
64		-.52	1.35	.09	1.18	.328	1.71	.81
65		3.06	3.00	3.43	2.14	.883	4.94	3.22
			MEAN DU(M/S) =	-.18				
			MEAN DV(M/S) =	.14				
			SD DU(M/S) =	3.26				
			SD DV(M/S) =	3.95				
			R(DU, DV) =	.04				
			MEAN W(M/S) =	4.04				
			SD W(M/S) =	3.16				
			SD MEAN(W/S) =	2.43				
			MEAN MAXW(M/S) =	7.09				
			SD MAXW(M/S) =	3.69				

KSC , WL GT 6000M , WINTER 3HR WIND CHANGE 3-9KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-1.19	1.28	.05	.38	.161	1.26	.48	2.02
2	2.26	.53	-.22	.51	.121	3.32	.57	3.73
3	3.62	.70	1.41	1.11	.391	4.02	.80	5.33
4	-.29	.72	-.23	.87	-.698	1.07	.52	2.04
5	1.48	.89	12.27	2.63	.519	12.38	2.66	16.21
6	2.65	2.16	2.91	1.15	.842	4.25	1.85	7.09
7	-.75	3.32	-7.31	2.81	.388	7.94	3.15	11.38
8	-.12	.39	-1.19	1.83	-.313	1.77	1.34	4.45
9	-.05	.40	1.57	.45	.117	1.63	.42	2.11
10	-.85	.28	-2.60	2.74	-.172	3.08	2.36	7.55
11	-.82	1.39	1.41	.892	.892	2.33	1.02	5.18
12	-.58	1.81	-2.91	3.03	.916	4.14	2.02	6.94
13	-1.78	1.02	1.01	1.66	-.625	2.52	1.29	4.89
14	-6.94	4.91	-.56	1.84	.433	7.65	4.18	12.25
15	-2.70	.89	-.28	3.18	-.359	4.17	.87	6.75
16	-1.83	2.45	-.24	1.42	-.899	2.65	2.09	7.18
17	-1.97	1.60	-.27	1.50	.557	2.75	1.07	4.07
18	-.87	.86	.03	.58	-.291	1.10	.79	2.92
19	-.46	.69	-2.19	.43	-.895	2.32	.50	3.25
20	-.08	1.95	-.19	.28	-.372	1.82	.76	3.13
21	-.04	.76	.86	.60	.060	1.24	.36	1.68
22	-.95	.21	-.89	.49	-.382	1.38	.27	1.77
23	-.42	1.30	-1.07	1.53	-.816	2.20	.69	3.42
24	-.36	.74	-5.11	2.45	-.708	5.16	2.49	8.15
25	-1.79	2.09	.87	.91	-.966	2.37	1.88	5.03
26	-.50	.19	-1.10	1.14	-.973	1.47	.79	2.48
27	.82	2.43	-.89	1.70	-.588	2.97	1.20	5.17
28	.24	1.06	1.07	2.01	-.421	2.27	1.10	4.88
29	.00	2.23	5.08	2.55	-.955	5.82	1.83	8.65
30	2.71	.49	-.41	.47	-.658	2.77	.54	3.81
31	-1.78	3.68	-6.51	4.16	-.779	7.77	4.00	12.41
32	-1.34	.55	.62	2.26	-.505	2.68	.61	3.59
33	7.10	1.36	-2.16	1.25	-.459	7.51	1.44	9.22
34	3.04	.29	1.12	1.04	-.240	3.38	.49	4.22
35	1.85	.96	3.61	1.37	-.496	4.27	1.02	5.69
36	.11	2.47	2.51	3.57	-.838	4.06	2.93	11.45
37	2.07	1.54	-1.80	1.34	-.776	3.37	.57	4.08
38	.94	1.91	.48	2.60	-.995	3.13	1.28	5.39
39	2.63	.80	1.87	1.31	-.196	3.49	.75	4.76
40	4.08	.39	4.50	1.01	-.510	6.14	.60	6.92
41	.50	1.06	1.36	2.12	-.610	2.37	1.44	4.98
42	1.62	.86	3.53	.64	.523	3.94	.86	5.45
43	-5.55	5.14	1.67	7.71	-.998	10.45	3.18	13.78
44	.53	.40	-1.71	.61	-.096	1.83	.63	3.19
45	-2.23	.57	2.38	.48	-.626	3.32	.34	3.63
46	.54	2.78	.88	1.89	-.563	3.23	1.37	7.26
47	.15	.78	1.08	1.38	-.403	1.53	1.17	4.57
48	.06	1.37	1.86	.59	-.635	2.27	.73	3.44
49	1.42	1.30	-2.06	.45	-.612	2.69	.96	4.50
50	2.15	1.73	2.53	1.20	-.240	3.67	1.40	5.16
51	-1.61	.74	1.58	.98	-.906	2.55	.23	2.84
52	-.10	.88	-.68	1.59	-.684	1.46	1.28	5.66
53	-1.47	.33	-.91	.76	-.525	1.82	.58	2.88
54	-2.43	1.61	-.95	1.06	-.941	2.90	1.46	5.06
55	.09	1.69	-7.87	2.44	-.954	8.07	2.38	11.93
56	.08	.69	.65	1.17	-.453	1.40	.55	2.40
57	-5.95	1.76	-1.68	1.70	-.894	6.41	1.76	8.89
58	-1.32	1.36	2.72	.61	-.223	3.28	.77	4.31

WIND CHILL INDEX

MEAN DU(M/S) =	- .16
MEAN DV(M/S) =	.14
SD DU(M/S) =	3.04
SD DV(M/S) =	3.56
R(DU,DV) =	.11
MEAN W(M/S) =	3.69
SD W(M/S) =	2.89
MEAN X(M/S) =	2.41
MEAN Y(M/S) =	5.84
SD MAX(W/M/S)	3.29

ORIGINAL PAGE IS
OF POOR QUALITY

KSC ,WL GT 9000M , WINTER 3HR WIND CHANGE 3 9KM															
NP	L COMPONENT CHANGE				MEAN	U COMPONENT CHANGE				R	VECTOR WIND CHANGE		MAX		
	MEAN	STD.DEV.	STD.DEV.	STD.DEV.		STD.DEV.	MEAN	STD.DEV.							
1	.02	.89	.01	.19	.392	.86	.29	1.17							
2	2.58	.48	-.31	.38	.583	2.63	.46	3.39							
3	4.04	.55	.85	.62	-.860	4.19	.47	5.26							
4	-.24	.33	.08	.35	-.657	.50	.23	.86							
5	.79	.76	12.24	2.29	.535	12.28	2.31	15.18							
6	2.25	1.85	2.61	.80	.902	3.74	1.38	5.29							
7	-1.05	2.58	-7.36	2.50	.880	7.77	2.79	13.36							
8	.12	.48	-1.37	1.38	-.801	1.69	1.07	3.44							
9	-.12	.24	1.51	.29	.603	1.54	.25	1.85							
10	-.89	.46	-2.78	1.88	-.640	3.10	1.64	5.46							
11	-.50	1.15	1.80	1.50	.989	2.42	1.08	4.82							
12	-.77	1.55	-3.31	2.67	.979	3.99	2.26	7.37							
13	-1.64	.86	1.07	1.13	-.901	2.07	1.25	4.12							
14	-6.59	2.46	-.12	1.67	.235	6.80	2.45	9.48							
15	-2.53	1.04	.42	2.18	-.659	3.19	1.48	6.57							
16	-2.08	2.62	-.34	.70	-.922	2.89	1.85	6.24							
17	-1.91	.85	.41	.68	.568	2.17	.55	2.88							
18	-.95	.40	.25	.18	.029	1.01	.37	2.03							
19	.64	.62	-2.18	.08	.017	2.34	.28	3.30							
20	.24	1.83	.02	.42	.774	1.71	.79	3.21							
21	-.09	.37	.68	.83	-.162	1.07	.40	1.45							
22	-1.03	.16	-.72	.40	.861	1.29	.33	1.73							
23	-.49	.72	-.84	.99	-.825	1.52	.38	2.09							
24	-.26	.54	-4.96	1.93	.819	4.99	1.94	7.18							
25	-1.91	1.44	.95	.93	-.886	2.25	1.55	4.06							
26	-.38	.18	-1.14	.78	-.891	1.30	.62	2.20							
27	.86	1.36	-1.06	.98	-.840	1.88	1.06	3.57							
28	.26	.47	1.24	1.39	.306	1.49	1.23	4.02							
29	-.48	1.82	4.28	2.59	.960	5.03	1.79	7.70							
30	2.61	.78	-.55	.91	.680	2.88	.45	3.47							
31	-2.16	3.23	-6.85	3.41	.936	7.80	3.57	11.99							
32	-1.47	.64	.61	1.32	-.713	2.08	.60	2.95							
33	7.04	.99	-2.20	.97	-.733	7.42	1.13	8.53							
34	3.02	.26	1.21	.52	.652	3.28	.40	3.88							
35	1.66	.97	3.74	1.28	-.646	4.31	.89	5.32							
36	-.45	2.50	3.17	3.63	-.938	4.54	3.00	10.57							
37	2.05	.89	-1.43	.99	.790	2.81	.29	3.20							
38	.58	1.27	.72	1.97	-.987	2.39	.79	3.42							
39	2.69	.92	1.90	1.18	-.137	3.51	.88	4.54							
40	4.05	.69	4.59	.76	.589	6.14	.91	7.75							
41	.14	1.00	1.47	1.51	-.832	2.07	1.08	3.93							
42	1.66	.32	3.68	.35	.069	4.05	.36	4.80							
43	-5.29	3.21	1.37	4.81	-.997	7.67	2.08	9.84							
44	.60	.19	-1.88	.40	-.295	1.98	.41	2.60							
45	-2.06	.63	2.38	.38	.647	3.22	.28	3.59							
46	.86	2.14	.55	1.70	-.832	2.72	1.04	5.54							
47	.32	.61	1.47	1.19	.668	1.63	1.17	4.01							
48	.25	.46	1.77	.34	-.848	1.86	.26	2.38							
49	1.28	.52	-2.17	.28	-.423	2.55	.43	3.28							
50	2.36	1.65	2.34	.79	-.348	3.66	.99	4.66							
51	-1.75	.39	1.56	.61	-.133	2.41	.44	3.20							
52	.29	1.15	-.92	1.79	-.914	1.78	1.52	6.23							
53	-1.65	.47	-.82	.52	-.646	1.94	.32	2.90							
54	-2.45	.88	-.96	.43	-.948	2.64	.96	3.79							
55	-.40	1.56	-7.72	1.05	-.788	7.90	.96	9.46							
56	-1.10	.56	-.56	.84	-.755	1.08	.43	2.03							
57	-5.98	1.14	-1.50	1.73	-.975	6.37	1.31	8.29							
58	-1.33	.47	2.77	.59	-.411	3.13	.47	3.67							

KSC	WL	GT	9000M	WINTER 3HR WIND CHANGE 3-9KM	1.58	.314	5.12	2.36	8.34
59	3.90	3.62	-1.01	1.58	.314	5.12	2.36	8.34	
60	-3.31	.39	1.65	.41	.561	1.73	.37	2.59	
61	-5.95	1.84	-4.89	1.43	.055	7.89	1.56	9.60	
62	-4.77	1.91	-1.45	1.27	.486	5.14	1.92	7.44	
63	-1.74	.71	1.86	1.45	-.477	2.81	1.07	3.93	
64	-1.63	.18	-.04	.49	-.295	.80	-.21	1.05	
65	3.27	1.59	3.57	1.68	.977	4.85	2.31	7.48	

MEAN DU(M/S) = -.18
 MEAN DV(M/S) = .16
 SD DU(M/S) = 2.77
 SD DV(M/S) = 3.29
 R(DU,DV) = .16
 MEAN W(M/S) = 3.41
 SD W(M/S) = 2.62
 MEAN MAXW(M/S) = 2.28
 SD MAXW(M/S) = 5.07
 MEAN MAXW(M/S) = 3.07
 SD MAXW(M/S) = 3.07

KSC UNFILTERED WINTER 3HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	.64	1.89	-30	2.04	-.287	2.54	1.31	6.47
2	1.19	3.02	2.47	2.49	-.110	4.42	1.80	7.71
3	-1.06	7.18	.51	2.49	-.446	8.27	4.87	18.87
4	1.04	2.74	1.03	2.84	-.238	3.71	1.98	8.42
5	5.25	4.87	-1.26	4.49	-.411	7.93	3.17	15.12
6	-1.90	2.95	.35	2.98	-.316	4.14	2.02	8.12
7	-6.03	3.88	-12.57	8.21	-.189	15.40	6.29	29.68
8	1.64	1.70	-2.41	3.14	-.216	1.93	1.93	8.11
9	-.27	2.44	.98	2.04	-.064	2.79	1.84	7.99
10	2.45	4.40	-2.12	5.20	.383	6.71	3.42	13.29
11	1.25	2.05	2.12	3.42	.431	4.06	2.34	10.64
12	-1.57	5.16	-.72	5.90	.027	7.56	2.68	16.14
13	.33	3.92	.34	2.20	-.135	3.88	2.30	10.90
14	-1.77	5.85	2.99	4.82	-.140	7.76	3.03	16.11
15	-1.14	4.01	3.02	6.29	-.627	7.41	3.32	14.24
16	-3.87	2.87	1.17	7.66	-.118	7.88	4.59	18.53
17	.09	2.12	-2.19	2.33	.090	3.43	1.72	8.25
18	.43	1.81	-.57	2.53	-.199	2.72	1.66	7.05
19	2.36	2.45	-2.00	2.66	-.069	3.95	2.65	10.63
20	-.61	4.19	.80	3.66	-.334	4.95	2.71	9.63
21	-.04	2.37	-1.48	3.12	-.424	3.72	1.94	8.59
22	-.79	2.08	.63	2.64	-.237	3.14	1.56	7.29
23	-1.46	1.77	.09	2.81	-.137	3.04	1.97	8.00
24	-.90	2.13	-.77	2.52	-.476	3.03	1.74	7.36
25	-.58	2.91	2.21	2.22	-.173	3.96	1.67	7.16
26	-2.47	2.22	-1.11	2.75	-.158	3.92	2.11	8.25
27	.48	3.38	-1.39	3.05	-.045	4.18	2.33	10.51
28	1.79	3.51	3.51	4.26	-.115	6.20	2.74	14.07
29	1.36	6.86	1.32	7.76	-.084	9.97	3.34	16.43
30	-1.84	4.65	-2.46	3.51	-.590	5.73	3.22	13.80
31	-3.87	3.65	-3.95	6.89	-.346	7.92	5.35	23.76
32	-.69	2.89	1.51	3.34	-.070	4.14	2.25	9.48
33	4.62	2.01	.26	2.54	-.545	5.33	1.86	8.57
34	1.03	1.50	.88	2.94	-.314	3.18	1.63	7.02
35	-.53	1.43	3.02	2.74	-.422	3.91	1.90	8.31
36	-4.04	4.13	1.94	7.81	-.652	9.06	3.97	18.96
37	.41	2.75	-.45	2.83	-.293	3.53	1.85	11.42
38	2.19	3.30	1.69	4.00	-.231	5.30	2.53	11.19
39	-.71	2.25	1.70	1.81	-.079	3.07	1.51	6.18
40	4.53	3.34	3.95	3.20	-.156	6.89	3.17	13.45
41	-2.60	2.32	2.92	2.87	-.023	4.91	2.17	9.95
42	2.00	4.12	5.15	3.05	-.153	7.23	2.08	13.09
43	-3.52	4.19	.45	4.29	-.295	5.89	3.72	15.32
44	2.01	2.15	-.31	2.33	-.579	3.26	1.89	7.95
45	1.02	2.04	3.33	2.59	-.170	4.30	2.10	10.40
46	1.81	5.32	-3.67	5.81	-.771	7.07	5.36	21.75
47	-1.49	2.88	2.48	3.05	-.280	4.67	2.04	9.27
48	1.79	1.67	1.60	2.28	-.347	3.43	1.40	6.54
49	1.48	3.31	-2.78	2.61	-.218	4.67	2.42	11.64
50	2.30	3.48	-1.36	4.43	-.375	5.35	3.19	12.43
51	-2.41	1.89	-.08	2.26	-.244	3.41	1.69	7.40
52	2.02	7.61	-5.65	7.37	-.111	10.99	5.19	20.25
53	-2.37	2.67	-.63	3.12	-.722	4.24	2.19	10.46
54	-1.87	4.59	-1.14	4.98	-.165	6.53	2.80	11.58
55	3.19	6.20	-.04	6.83	-.421	8.48	4.81	17.03
56	3.80	3.39	1.33	2.15	-.259	5.04	2.60	10.95
57	-2.62	2.89	2.11	3.16	-.052	4.95	2.23	11.16
58	-.89	3.68	1.69	3.62	-.125	4.69	2.86	12.79

ORIGINAL PAGE IS
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KSC UNFILTERED WINTER 3HR WIND CHANGE 9-16 KM

59	-4.56	3.32	-4.03	8.62	-.318	9.85	5.01	22.19
60	-.74	1.18	1.78	2.36	-.171	2.85	1.59	6.36
61	1.47	5.65	-2.50	2.95	.114	6.17	3.29	12.79
62	1.79	2.09	.74	2.74	.313	3.56	1.71	7.66
63	-2.24	2.57	-1.37	3.22	-.585	4.44	2.03	9.65
64	-.30	1.47	-1.38	2.46	-.489	2.75	1.62	7.57
65	.79	2.16	3.45	3.06	.103	4.83	1.78	8.45

MEAN DU(M/S) = -.05
 MEAN DV(M/S) = .07
 SD DU(M/S) = 4.22
 SD DV(M/S) = 4.95
 R(DU,DV) = .02
 MEAN W(M/S) = 5.33
 SD W(M/S) = 3.73
 SD MEAN(M/S) = 2.39
 MEAN MAXW(M/S) = 11.61
 SD MAXW(M/S) = 4.81

ORIGINAL PAGE IS
OF POOR QUALITY

KSC. WL GT 500M. WINTER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	.63	1.82	2.01	2.80	-.280	2.49	1.28	6.01
2	1.20	2.99	2.45	-.087	-.087	4.38	1.80	7.90
3	-1.06	7.19	6.31	-.445	-.445	8.29	4.88	18.49
4	1.04	2.74	2.85	-.236	-.236	3.72	1.98	8.33
5	5.26	4.87	4.52	-.408	-.408	7.95	3.17	14.66
6	-1.91	2.96	2.97	-.320	-.320	4.15	2.01	8.76
7	-6.03	3.92	8.25	-.194	-.194	15.41	6.33	28.97
8	1.64	1.66	3.05	-.239	-.239	4.11	1.91	8.25
9	-.28	2.43	1.98	-.081	-.081	2.76	1.77	7.01
10	2.45	4.43	5.21	-.385	-.385	6.73	3.45	13.15
11	1.25	2.02	3.40	-.441	-.441	4.05	2.31	10.71
12	-1.56	5.19	5.91	-.029	-.029	7.59	2.65	15.67
13	.33	3.95	2.17	-.132	-.132	3.89	2.32	10.86
14	-1.76	5.89	4.84	-.133	-.133	7.80	3.02	15.83
15	-1.14	4.04	6.31	-.625	-.625	7.45	3.31	14.21
16	-3.87	2.86	1.19	-.131	-.131	7.90	4.61	18.50
17	.08	2.07	2.23	-.071	-.071	3.35	1.71	7.96
18	.43	1.78	2.52	-.212	-.212	2.71	1.63	6.90
19	2.36	2.45	2.67	-.070	-.070	3.95	2.66	10.62
20	-.62	4.20	3.65	-.340	-.340	4.96	2.71	9.82
21	-.03	2.36	3.11	-.434	-.434	3.67	1.97	8.42
22	-.80	2.07	2.61	-.267	-.267	3.13	1.52	7.23
23	-1.46	1.74	2.77	-.138	-.138	3.00	1.95	8.29
24	-.89	2.11	2.46	-.521	-.521	2.97	1.75	6.97
25	-.58	2.88	2.20	-.198	-.198	3.95	1.64	7.25
26	-2.47	2.21	2.75	-.158	-.158	3.93	2.08	8.38
27	.47	3.38	3.06	-.051	-.051	4.18	2.33	10.32
28	1.80	3.47	4.28	-.115	-.115	6.20	2.73	14.01
29	1.37	6.89	7.79	-.090	-.090	10.01	3.34	16.42
30	-1.84	4.64	3.52	-.591	-.591	5.74	3.21	13.72
31	-3.88	3.65	6.92	-.346	-.346	7.94	5.37	23.20
32	-.69	2.87	3.37	-.084	-.084	4.13	2.29	9.55
33	4.63	1.98	2.52	-.549	-.549	5.32	1.85	8.54
34	1.03	1.47	2.92	-.332	-.332	3.15	1.62	6.75
35	-.53	1.41	2.69	-.416	-.416	3.89	1.88	8.07
36	-4.05	4.12	7.81	-.651	-.651	9.07	3.97	18.52
37	.41	2.77	2.83	-.308	-.308	3.56	1.83	11.49
38	2.19	3.29	3.98	-.219	-.219	5.30	2.48	10.33
39	-.71	2.25	1.78	-.088	-.088	3.06	1.50	6.13
40	4.54	3.29	3.19	-.163	-.163	6.85	3.18	13.03
41	-2.60	2.28	2.85	-.023	-.023	4.91	2.13	9.37
42	2.00	4.13	3.06	-.139	-.139	7.25	2.08	13.24
43	-3.53	4.21	4.27	-.300	-.300	5.90	3.71	15.18
44	2.01	2.15	2.32	-.587	-.587	3.26	1.87	7.36
45	1.01	2.02	2.59	-.186	-.186	4.30	2.08	10.20
46	1.80	5.38	5.87	-.777	-.777	7.12	5.41	21.80
47	-1.50	2.88	3.03	-.282	-.282	4.68	1.99	9.12
48	1.79	1.65	2.27	-.363	-.363	3.41	1.39	6.58
49	1.48	3.26	2.58	-.198	-.198	4.64	2.40	11.40
50	2.29	3.48	4.47	-.378	-.378	5.34	3.26	12.38
51	-2.40	1.87	2.23	-.272	-.272	3.40	1.64	7.45
52	2.01	7.67	7.42	-.113	-.113	11.06	5.21	20.41
53	-2.37	2.67	3.12	-.732	-.732	4.24	2.20	10.71
54	-1.87	4.60	4.93	-.172	-.172	6.52	2.77	11.00
55	3.19	6.22	6.86	-.424	-.424	8.53	4.80	16.43
56	3.80	3.39	2.12	-.273	-.273	5.04	2.59	10.61
57	-2.61	2.82	3.13	-.084	-.084	4.93	2.16	10.71
58	-.88	3.67	3.58	-.121	-.121	4.63	2.89	12.49

ORIGINAL PAGE IS
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KSC, WL GT 500M, WINTER 3 HR WIND CHANGE 9-16 KM

59	-4.56	3.31	-4.04	8.67	-0.317	9.88	5.04	22.13
60	-0.74	1.13	1.78	2.33	-0.154	2.80	1.62	6.38
61	1.48	5.66	-2.50	2.95	-0.103	6.19	3.27	12.85
62	1.79	2.08	.74	2.71	.343	3.53	1.71	7.78
63	-2.25	2.57	-1.36	3.20	-0.597	4.41	2.06	9.74
64	-0.29	1.44	-1.38	2.45	-0.507	2.72	1.62	7.60
65	.79	2.10	3.45	3.04	.101	4.80	1.75	8.19

MEAN DU(M/S) = -.05
 MEAN DV(M/S) = .07
 SD DU(M/S) = 4.22
 SD DV(M/S) = 4.95
 R(DU,DV) = .02
 MEAN W(M/S) = 5.33
 SD W(M/S) = 3.74
 SD MEAN(M/S) = 2.41
 MEAN MAXW(M/S) = 11.54
 SD MAXW(M/S) = 4.78

KSC. WL GT 1500M, WINTER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE			V-COMPONENT CHANGE			VECTOR WIND CHANGE		
	MEAN	STD.DEV.	MAX	MEAN	STD.DEV.	MAX	MEAN	STD.DEV.	MAX
1	.59	1.33	-32	1.70	.325	1.69	2.15	1.67	3.48
2	1.17	2.53	2.44	2.23	.019	1.67	3.98	1.67	7.23
3	-1.09	6.86	.62	5.90	-.457	4.63	7.86	4.63	17.89
4	1.10	2.56	1.04	2.62	-.234	1.84	3.51	1.84	7.43
5	5.26	4.65	-1.09	4.37	-.455	3.24	7.68	3.24	12.96
6	-1.91	2.76	.34	2.51	-.336	1.94	3.73	1.94	7.58
7	-6.05	3.70	-12.54	7.98	-.180	6.07	15.30	6.07	27.85
8	1.64	1.20	-2.37	2.10	-.175	1.54	3.43	1.54	6.43
9	-2.27	2.19	-.90	1.60	-.148	1.46	2.47	1.46	5.31
10	2.45	4.12	-2.17	5.00	-.435	3.38	6.42	3.38	12.49
11	1.23	1.77	2.12	3.11	-.539	2.20	3.74	2.20	9.40
12	-1.47	4.83	-.80	5.38	-.096	1.74	7.20	1.74	11.63
13	.30	3.47	.41	1.52	-.024	2.05	3.22	2.05	8.47
14	-1.83	5.56	3.01	4.26	-.241	2.86	7.30	2.86	13.94
15	-1.21	3.80	3.11	5.89	-.653	3.33	7.01	3.33	12.66
16	-3.80	2.79	1.14	7.02	-.089	4.11	7.47	4.11	15.81
17	.03	1.78	-2.17	1.56	-.149	1.40	2.89	1.40	6.42
18	.39	1.51	-.49	2.21	-.440	1.38	2.37	1.38	5.51
19	2.38	2.29	-2.07	2.54	-.155	2.54	3.89	2.54	11.42
20	-.69	3.60	.85	2.84	-.515	1.78	4.36	1.78	8.52
21	-.03	2.07	-1.46	2.87	-.506	1.57	3.49	1.57	6.59
22	-.87	1.50	.64	2.18	-.477	1.18	2.60	1.18	4.59
23	-1.41	1.33	.06	2.21	-.097	1.34	2.62	1.34	5.89
24	-.89	1.63	-.82	1.95	-.687	1.59	2.32	1.59	6.42
25	-.60	2.36	2.20	1.85	-.321	1.61	3.40	1.61	7.06
26	-2.45	2.08	-1.08	2.54	-.141	1.98	3.75	1.98	7.54
27	.45	2.94	-1.31	2.63	-.062	1.74	3.80	1.74	7.54
28	1.73	2.57	3.45	3.80	-.047	2.07	5.62	2.07	9.95
29	1.30	6.45	1.31	7.50	-.099	2.97	9.60	2.97	13.62
30	-1.83	4.18	-2.45	3.21	-.650	3.50	4.98	3.50	12.88
31	-3.83	2.48	-4.00	6.45	-.422	5.33	7.47	5.33	20.08
32	-.71	2.53	1.53	2.76	-.078	1.82	3.67	1.82	7.63
33	4.63	1.75	.30	2.27	-.618	1.65	5.19	1.65	8.80
34	1.07	1.20	.87	2.14	-.451	1.17	2.56	1.17	4.99
35	-.58	1.23	3.03	2.44	-.427	2.03	2.59	2.03	7.25
36	-4.10	3.69	1.96	7.39	-.665	8.74	8.74	3.53	15.75
37	.34	2.45	-.57	2.75	-.393	3.39	3.39	1.58	8.54
38	2.16	2.94	1.72	3.54	-.224	5.03	5.03	1.86	8.49
39	-.69	2.12	1.71	1.68	-.112	2.95	2.95	1.41	5.57
40	4.51	2.80	3.95	1.96	-.176	6.43	6.43	2.96	11.79
41	-2.66	1.65	2.90	2.51	-.107	4.58	4.58	1.91	7.95
42	1.99	3.86	5.02	2.39	-.194	1.72	6.84	1.72	11.82
43	-3.51	3.92	.43	3.72	-.393	5.50	5.50	3.37	13.53
44	1.99	1.97	-.33	1.96	-.550	3.00	3.00	1.67	5.91
45	1.04	1.67	3.32	2.29	-.248	4.05	4.05	1.94	8.92
46	1.86	4.93	-3.56	5.36	-.756	6.47	6.47	5.23	21.52
47	-1.49	2.56	2.43	2.61	-.350	4.27	4.27	1.80	7.36
48	1.74	1.36	1.65	2.00	-.312	3.11	3.11	1.38	6.02
49	1.46	2.90	-2.78	2.22	-.128	4.32	4.32	2.12	9.06
50	2.27	3.04	-1.36	4.00	-.475	4.90	4.90	2.85	11.11
51	-2.35	1.71	-.06	1.88	-.295	3.09	3.09	1.56	6.49
52	2.08	7.30	-5.59	7.14	-.153	10.77	10.77	4.87	18.61
53	-2.37	2.52	-.67	2.80	-.761	3.99	3.99	2.07	9.36
54	-1.85	4.36	-1.32	3.87	-.183	5.84	5.84	2.22	9.45
55	3.25	5.68	-.01	6.43	-.565	8.15	8.15	4.19	15.65
56	3.73	3.19	1.41	2.16	-.323	4.91	4.91	2.56	10.07
57	-2.53	2.26	2.05	2.39	-.063	4.31	4.31	1.69	7.83
58	-.80	3.22	1.65	2.67	-.006	3.81	3.81	2.51	8.48

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KSC, WL GT 1500M, WINTER 3 HR WIND CHANGE 9-16 KM

59	-4.64	2.89	-3.96	8.40	- .348	9.66	4.76	21.84
60	-.75	.79	1.74	1.96	.130	2.40	1.50	5.50
61	1.38	5.19	-2.50	2.25	.151	5.61	2.93	12.27
62	1.78	1.74	.75	2.10	.449	3.01	1.45	5.73
63	-2.26	2.39	-1.37	2.93	.720	4.24	1.79	8.18
64	-.32	1.13	-1.42	1.99	-.600	2.34	1.36	5.51
65	.85	1.71	3.47	2.66	.099	4.46	1.67	7.15

MEAN DU(M/S) = -.06
 MEAN DV(M/S) = .08
 SD DU(M/S) = 3.95
 SD DV(M/S) = 4.63
 R(DU,DV) = .03
 MEAN W(M/S) = 4.94
 SD W(M/S) = 3.56
 MEAN MAXW(M/S) = 2.43
 SD MAXW(M/S) = 9.98
 MEAN MAXW(M/S) = 4.75

KSC, WL GT 3000M, WINTER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		
	MEAN	STD.DEV.	STD.DEV.	STD.DEV.		MEAN	STD.DEV.	MAX
1	.54	.89	.84	.428	-.428	1.21	.66	2.22
2	1.03	2.19	1.62	-.232	-.232	3.65	1.10	5.42
3	-1.07	6.61	5.18	-.486	-.486	7.58	3.83	15.21
4	1.10	2.12	2.26	-.183	-.183	3.30	.90	5.24
5	5.26	4.24	2.62	-.549	-.549	6.36	3.62	11.11
6	-1.74	2.30	2.08	-.560	-.560	3.21	1.59	6.32
7	-5.90	2.01	6.71	.032	.032	14.52	5.09	23.48
8	1.59	.60	1.86	-.017	-.017	3.18	1.38	5.70
9	-.23	1.62	1.38	-.233	-.233	2.10	.92	4.26
10	2.41	3.06	4.29	.417	.417	5.62	2.32	11.12
11	1.15	1.47	2.99	.560	.560	3.52	2.06	6.88
12	-1.26	4.10	4.83	.201	.201	6.47	.87	8.73
13	.24	2.20	.77	.028	.028	2.11	1.10	4.89
14	-2.02	4.75	3.43	.499	.499	6.73	1.49	9.82
15	-1.34	3.05	5.07	-.791	-.791	6.09	2.95	10.09
16	-3.66	2.68	5.60	.078	.078	6.57	3.08	13.64
17	-.03	1.37	1.37	-.848	-.848	2.56	.96	4.63
18	.37	1.08	1.98	-.435	-.435	2.15	.90	3.66
19	2.35	1.69	2.09	-.062	-.062	3.78	2.05	9.35
20	-.69	3.36	2.38	.646	.646	4.10	1.16	6.33
21	-.09	1.56	2.33	-.376	-.376	2.72	1.39	6.02
22	-.82	1.10	1.72	-.681	-.681	2.05	1.00	3.93
23	-1.36	1.05	1.95	-.136	-.136	2.30	1.21	4.15
24	-.89	1.25	1.17	.796	.796	1.73	1.13	4.11
25	-.63	2.16	1.42	.450	.450	3.21	1.27	5.23
26	-2.46	1.88	2.15	-.181	-.181	3.51	1.68	5.85
27	.41	2.46	1.92	-.005	-.005	3.07	1.56	6.10
28	1.42	2.43	2.51	.120	.120	4.68	1.83	7.91
29	1.24	5.45	6.82	.005	.005	8.20	3.45	12.92
30	-1.81	3.77	2.57	.881	.881	4.16	3.54	11.38
31	-3.67	2.96	5.44	.555	.555	6.50	4.95	16.10
32	-.78	2.12	1.30	.467	.467	2.89	.97	4.71
33	4.74	1.47	1.94	-.825	-.825	5.17	1.31	8.06
34	1.18	1.09	1.29	-.250	-.250	1.99	1.05	4.55
35	-.59	1.06	2.09	.327	.327	3.27	2.12	6.58
36	-4.02	3.26	6.58	-.753	-.753	7.86	3.46	13.30
37	.32	1.57	1.64	.302	.302	2.21	.71	3.27
38	2.20	2.28	2.97	-.443	-.443	4.42	1.72	7.36
39	-.70	1.99	1.67	.302	.302	2.85	1.44	5.34
40	4.49	2.34	1.75	.394	.394	6.13	2.55	10.30
41	-2.67	1.01	1.87	.168	.168	4.31	1.23	7.10
42	1.62	2.80	1.49	-.730	-.730	5.98	1.06	7.77
43	-3.26	3.40	2.81	-.486	-.486	4.99	2.32	10.26
44	1.93	1.68	1.53	.510	.510	2.68	1.34	4.72
45	1.08	1.19	1.84	-.445	-.445	3.84	1.56	6.95
46	1.88	3.54	4.18	-.640	-.640	5.31	4.20	15.02
47	-1.51	2.10	2.12	.525	.525	3.72	1.94	6.40
48	1.64	1.13	1.22	-.339	-.339	2.74	.82	4.16
49	1.50	2.52	1.17	-.237	-.237	3.85	1.37	6.60
50	2.39	2.41	2.30	.770	.770	3.96	1.62	7.14
51	-2.34	1.59	1.31	.277	.277	2.74	1.49	5.52
52	2.26	5.16	5.05	-.202	-.202	8.69	4.07	14.32
53	-2.41	1.87	2.19	-.775	-.775	3.52	1.45	6.99
54	-1.95	3.85	2.55	.215	.215	4.31	2.85	9.47
55	3.41	4.73	4.75	.730	.730	6.79	3.24	10.64
56	3.70	2.56	1.67	.136	.136	4.45	2.37	8.59
57	-2.57	1.75	2.35	-.007	-.007	4.14	1.32	5.85
58	-.69	2.81	1.94	.073	.073	3.47	1.60	6.27

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KSC, WL GT 3000M, WINTER 3 HR WIND CHANGE 9-16 KM

59	-4.50	2.52	-3.65	7.52	-1.522	8.99	3.93	18.08
60	-1.83	.64	1.65	1.75	.466	2.27	1.32	5.00
61	1.35	4.77	-2.53	.99	.655	5.06	2.51	10.09
62	1.62	1.11	.73	1.73	.216	2.51	1.05	4.12
63	-2.13	1.51	-1.44	2.20	.817	3.45	1.33	6.27
64	-1.38	.79	-1.40	1.40	.735	2.04	.75	3.18
65	1.00	1.54	3.40	2.25	.237	3.97	2.05	6.87

MEAN DU(M/S) = -.05
 MEAN DV(M/S) = .09
 SD DU(M/S) = 3.50
 SD DV(M/S) = 4.04
 R(DU,DV) = .06
 MEAN W(M/S) = 4.33
 SD W(M/S) = 3.13
 SD MEAN(M/S) = 2.24
 MEAN MAXW(M/S) = 7.89
 SD MAXW(M/S) = 4.01

KSC, WL GT 6000M, WINTER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		
	MEAN	STD.DFV.	STD.DFV.	STD.DFV.		MEAN	STD.DFV.	MAX
1	.53	.64	.37	.095	-.095	.74	.56	1.84
2	.70	2.09	1.36	-.445	-.445	3.53	.89	4.99
3	-.54	5.29	2.46	-.659	-.659	5.73	1.43	8.16
4	1.38	.84	1.60	.172	.172	2.35	.74	3.53
5	5.19	3.98	3.06	-.866	-.866	6.45	3.33	10.59
6	-1.65	2.76	1.28	.860	.860	3.37	1.08	5.71
7	-6.19	.73	6.23	.453	.453	14.87	5.06	21.32
8	1.70	.45	1.00	-.104	-.104	2.88	.88	4.51
9	-.04	1.15	1.06	-.410	-.410	1.68	.38	2.30
10	2.66	1.52	2.14	.774	.774	3.61	1.54	7.31
11	1.34	1.66	2.48	.754	.754	3.16	2.08	6.57
12	-1.24	3.44	4.58	.589	.589	5.83	1.57	8.33
13	.26	1.23	.64	-.743	-.743	1.23	.81	3.37
14	-1.86	2.91	2.84	.815	.815	5.34	1.04	7.93
15	-1.30	2.03	3.75	-.863	-.863	4.30	3.16	9.21
16	-3.68	2.95	3.89	.750	.750	5.92	1.69	8.35
17	-.13	1.09	.64	-.829	-.829	2.26	.55	3.16
18	-.32	.78	1.36	-.501	-.501	1.51	.64	2.88
19	2.25	1.15	1.90	.594	.594	3.74	1.38	7.91
20	-.45	3.33	1.24	.793	.793	3.66	.90	4.76
21	-.06	.67	1.28	.458	.458	1.70	1.06	3.67
22	-.80	.47	.66	-.357	-.357	1.18	.62	2.02
23	-1.46	.62	1.30	-.452	-.452	2.05	.38	2.94
24	-.89	1.21	.96	.898	.898	1.55	.97	3.37
25	-.47	1.46	.88	.059	.059	2.84	1.15	4.91
26	-2.27	1.69	1.19	-.197	-.197	2.94	1.36	5.16
27	.07	1.01	.97	-.022	-.022	1.78	.98	3.30
28	1.28	2.07	1.08	.027	.027	4.20	.89	5.46
29	1.02	3.32	4.05	.756	.756	5.13	1.86	7.95
30	-2.15	2.91	1.57	.520	.520	4.38	2.13	7.86
31	-3.63	2.65	4.63	.897	.897	6.15	4.86	12.87
32	-.98	1.60	.76	.525	.525	2.35	.87	3.47
33	4.68	1.03	1.68	-.856	-.856	4.98	1.00	6.74
34	1.22	.77	1.19	.094	.094	1.91	1.08	4.48
35	-.65	.83	1.57	-.746	-.746	3.09	1.63	5.87
36	-4.20	2.66	6.12	-.958	-.958	7.42	3.44	12.54
37	.37	.96	1.34	.145	.145	1.53	.75	2.88
38	2.28	1.92	1.35	-.507	-.507	3.62	1.18	5.70
39	-.71	1.86	1.37	.011	.011	2.66	1.17	3.86
40	4.59	2.05	1.30	.853	.853	6.08	2.32	8.98
41	-2.60	1.42	.82	.343	.343	4.20	.58	4.98
42	1.99	1.29	.88	-.488	-.488	5.33	.70	6.15
43	-2.94	2.22	1.72	-.828	-.828	3.47	2.21	10.56
44	1.94	.66	.88	-.211	-.211	2.20	.45	3.07
45	1.30	.70	.91	-.397	-.397	3.58	.77	4.89
46	1.90	1.55	1.60	-.767	-.767	3.72	2.02	8.13
47	-1.61	1.55	1.68	.603	.603	3.51	1.15	4.85
48	1.51	.41	.92	.426	.426	2.45	.86	4.73
49	2.10	1.13	1.02	-.346	-.346	3.60	1.11	5.22
50	2.26	1.74	1.27	.780	.780	3.10	1.32	5.35
51	-2.25	1.14	.64	-.859	-.859	2.38	1.06	3.90
52	2.37	3.29	2.99	-.773	-.773	7.01	2.81	10.58
53	-2.40	.91	.97	-.578	-.578	2.67	.83	4.41
54	-1.98	2.97	1.24	-.468	-.468	3.54	1.92	6.41
55	3.03	4.26	3.26	.962	.962	5.85	1.95	8.42
56	3.80	1.32	.51	-.120	-.120	4.01	1.19	6.10
57	-3.00	.62	1.63	-.610	-.610	3.82	.91	4.73
58	-1.28	1.32	1.34	.230	.230	2.58	1.17	3.99

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KSC, WL GT 6000M, WINTER 3 HR WIND CHANGE 9-16 KM

59	-4.75	1.83	-2.46	2.89	-1.755	6.23	1.25	8.19
60	-1.72	.59	1.66	1.39	.519	2.21	.84	3.60
61	1.59	1.83	-2.90	.57	.011	3.63	1.20	6.16
62	1.55	.71	.95	1.38	.478	2.23	.86	3.91
63	-2.26	1.26	-1.62	1.32	-.754	3.26	.64	4.59
64	-1.46	.45	-1.20	.82	-.686	1.50	.52	2.36
65	1.07	1.61	3.57	1.64	.883	3.87	2.05	7.36

MEAN DU(M/S) = -.05
 MEAN DV(M/S) = .10
 SD DU(M/S) = 3.01
 SD DV(M/S) = 3.41
 R(DU, DV) = .16
 MEAN W(M/S) = 3.69
 SD W(M/S) = 2.67
 SD MEAN(M/S) = 2.11
 MEAN MAXW(M/S) = 5.99
 SD MAXW(M/S) = 3.18

KSC, WL GT 9000M, WINTER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE			MAX
	MEAN	STD.DEV.	STD.DEV.	STD.DEV.		MEAN	STD.DEV.	STD.DEV.	
1	.55	.25	.56	.032	-.032	.80	.40	.40	1.87
2	.41	2.20	1.16	.070	.070	3.34	.23	.23	4.02
3	-.79	4.22	1.55	-.910	-.910	4.58	1.46	1.46	6.66
4	1.34	.48	.97	.545	.545	1.87	.59	.59	2.52
5	5.31	2.57	2.57	-.968	-.968	6.19	1.79	1.79	8.64
6	-1.32	2.07	.74	-.968	-.968	2.65	.78	.78	3.78
7	-6.20	.82	5.67	.399	.399	14.56	4.82	4.82	20.16
8	1.81	.53	.39	.339	.339	2.94	.40	.40	3.44
9	-.14	.59	.87	-.323	-.323	1.25	.34	.34	1.63
10	3.05	.91	.97	.732	.732	3.56	.59	.59	5.58
11	.64	2.46	1.85	.792	.792	3.24	1.53	1.53	5.53
12	-.93	3.34	3.44	.781	.781	4.73	1.98	1.98	7.62
13	.05	1.07	.58	-.918	-.918	1.09	.67	.67	2.81
14	1.40	1.40	1.21	.814	.814	4.54	.46	.46	5.88
15	-2.75	1.34	1.76	-.769	-.769	3.24	2.09	2.09	6.68
16	-1.26	3.36	2.77	.961	.961	5.30	1.31	1.31	6.90
17	-3.18	.83	.37	.553	.553	2.37	.56	.56	3.97
18	-.52	.31	.79	-.633	-.633	.89	.45	.45	1.70
19	.38	.61	1.85	.809	.809	3.81	1.26	1.26	6.69
20	2.16	2.25	.59	.823	.823	2.55	.59	.59	3.38
21	-.43	.32	.55	.362	.362	1.43	.53	.53	2.32
22	-.04	.54	.47	-.895	-.895	1.18	.68	.68	2.44
23	-.95	.29	.77	.499	.499	1.83	.38	.38	2.97
24	-1.59	1.17	.43	.663	.663	1.43	.97	.97	3.04
25	-1.02	.85	.32	-.123	-.123	2.87	.47	.47	3.84
26	-.54	1.26	.83	.170	.170	2.55	1.03	1.03	3.88
27	-2.00	.27	.71	.670	.670	1.52	.29	.29	2.02
28	.57	2.30	.39	.075	.075	4.00	.50	.50	4.83
29	.86	1.82	2.38	.643	.643	3.38	1.44	1.44	5.35
30	.91	2.65	.67	-.131	-.131	4.16	1.27	1.27	6.34
31	-1.44	2.41	3.14	.758	.758	6.45	3.54	3.54	12.00
32	-3.43	.91	.63	.279	.279	2.06	.57	.57	2.94
33	-1.08	1.56	1.44	-.874	-.874	5.03	1.38	1.38	7.22
34	4.76	.52	1.23	.183	.183	2.24	.96	.96	4.40
35	1.43	.38	1.41	-.864	-.864	3.08	1.44	1.44	5.33
36	-.50	2.23	4.95	-.946	-.946	6.24	2.81	2.81	10.76
37	-3.70	.49	1.14	.368	.368	1.23	.75	.75	2.50
38	.56	1.72	.50	-.202	-.202	3.53	1.27	1.27	5.94
39	2.66	1.47	.76	-.306	-.306	1.91	.71	.71	2.64
40	-.42	1.12	.98	.904	.904	6.38	1.68	1.68	8.61
41	4.78	1.42	.50	-.322	-.322	3.95	.77	.77	4.87
42	-2.24	1.47	.79	.493	.493	5.06	.96	.96	6.00
43	1.78	1.20	1.51	-.934	-.934	3.97	1.71	1.71	7.76
44	-3.44	1.86	.50	-.002	-.002	2.14	.58	.58	3.00
45	2.02	.65	.63	-.104	-.104	3.60	.58	.58	4.54
46	1.25	.82	.74	-.568	-.568	3.54	.86	.86	5.63
47	2.06	.63	1.20	.698	.698	3.12	.73	.73	4.08
48	-1.66	.89	1.31	.490	.490	2.75	1.22	1.22	5.45
49	1.34	.21	.87	-.212	-.212	3.54	.77	.77	4.35
50	2.38	.61	.83	-.904	-.904	2.85	.74	.74	4.45
51	-2.42	.97	.83	-.919	-.919	2.44	.68	.68	3.50
52	-2.29	.69	.13	-.846	-.846	6.42	1.92	1.92	8.50
53	2.22	2.18	1.50	-.406	-.406	2.53	.45	.45	3.39
54	-2.40	.50	.48	-.766	-.766	3.20	.97	.97	4.49
55	-2.12	1.66	1.20	-.973	-.973	4.67	1.29	1.29	6.27
56	2.97	2.68	2.61	.473	.473	4.11	1.21	1.21	5.93
57	3.89	1.23	.44	-.956	-.956	3.52	1.36	1.36	4.76
58	-3.00	1.06	1.05	-.551	-.551	2.46	.91	.91	3.83

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KSC, WL GT 9000M, WINTER 3 HR WIND CHANGE 9-16 KM

59	-4.56	.66	-2.00	1.77	-.617	5.28	.70	6.26
60	-.63	.38	1.58	1.15	.290	1.87	.92	3.15
61	.93	.69	-3.19	.68	-.104	3.38	.74	4.87
62	1.01	.92	.80	1.14	.028	1.86	.57	2.77
63	-2.42	.86	-1.14	.83	-.624	2.86	.62	3.99
64	-.48	.20	-1.41	.80	-.520	1.57	.66	2.54
65	1.32	1.11	3.87	.91	.873	4.16	1.23	6.65

MEAN DU(M/S) = -.04
 MEAN DV(M/S) = .12
 SD DU(M/S) = 2.74
 SD DV(M/S) = 3.12
 R(DU,DV) = .18
 MEAN W(M/S) = 3.40
 SD W(M/S) = 2.38
 SD MEAN(M/S) = 2.02
 MEAN MAXW(M/S) = 5.07
 SD MAXW(M/S) = 2.86

KSC ,UNFILTERED TRANS 3HR WIND CHANGE 3-9KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	-.73	1.99	2.02	1.71	-.448	2.88	1.78	7.60
2	1.42	1.96	-1.38	1.38	.505	2.83	1.28	6.30
3	.86	2.63	-2.26	1.92	-.657	3.38	2.23	10.36
4	.92	1.90	-1.52	1.24	-.183	2.59	1.25	5.11
5	1.26	1.87	1.83	3.90	-.078	3.90	2.90	11.68
6	.79	2.76	.77	2.99	-.649	3.68	2.04	8.88
7	-1.62	2.73	1.24	2.74	.406	3.98	1.81	10.08
8	-1.11	2.09	-3.17	3.13	.021	4.47	2.32	8.40
9	2.46	2.02	1.50	1.60	.241	3.41	1.81	7.67
10	1.37	2.74	3.45	2.99	-.235	5.22	1.69	9.54
11	-.86	.82	-1.31	1.26	.153	1.91	1.03	3.88
12	-2.28	1.82	-.41	1.51	.220	2.75	1.84	10.12
13	.28	2.66	-1.38	1.62	.226	3.00	1.64	6.72
14	-.95	1.31	2.47	2.44	-.198	3.48	1.60	6.90
15	.55	2.73	-2.60	4.08	-.081	4.19	3.68	13.96
16	1.29	1.79	.26	3.64	-.253	3.81	1.91	9.23
17	-.74	1.69	-.55	1.26	.058	2.15	.82	4.86
18	-5.29	5.99	-.30	1.87	.598	5.94	5.67	16.63
19	2.93	2.55	-.92	2.36	-.614	4.04	2.28	9.75
20	.77	2.79	-2.25	3.84	.459	4.82	2.22	8.98
21	-.94	2.59	-.89	1.93	.492	2.74	2.14	8.51
22	.31	2.16	2.00	2.79	.045	3.69	1.70	6.96
23	.50	3.49	2.85	2.08	.017	4.56	2.01	8.69
24	-3.12	3.17	-1.26	4.79	.285	6.07	2.72	11.72
25	-.31	2.10	3.59	1.36	-.213	4.22	1.20	6.42
26	.62	2.96	-2.20	2.39	-.014	3.95	2.09	9.30
27	.72	3.00	-3.72	3.52	-.017	5.13	3.07	13.30
28	2.28	3.15	1.65	3.65	-.699	5.02	2.42	11.64
29	-1.26	1.65	-.94	1.44	.175	2.27	1.45	6.71
30	-3.75	3.58	-.87	4.04	.375	5.66	3.44	12.65
31	3.05	2.31	2.52	1.73	.455	4.49	1.96	9.08
32	.24	1.09	3.24	1.49	.025	3.48	1.36	6.37
33	-.34	2.57	.87	2.61	.230	3.36	1.72	7.04
34	.70	2.82	-1.47	2.53	.133	3.67	1.87	8.45
35	-.71	1.67	1.17	1.60	.119	2.45	1.10	4.76
36	2.18	1.61	.58	1.62	-.298	3.02	1.08	4.90
37	.44	1.85	1.84	1.59	-.379	2.85	1.17	4.95
38	.86	1.51	1.11	1.94	.379	2.61	1.08	5.18
39	2.49	2.00	1.07	2.65	-.089	4.09	1.28	7.45
40	1.32	2.82	-.91	1.43	.122	2.87	2.08	9.27
41	-1.51	1.87	3.49	2.98	-.078	4.66	2.26	8.80
42	1.44	2.52	1.46	2.94	-.701	3.82	2.15	8.81
43	.70	2.15	-.26	1.95	.100	2.59	1.50	6.37

MEAN DU(M/S) = .17
 MEAN DV(M/S) = .24
 SD DU(M/S) = 3.03
 SD DV(M/S) = 3.19
 R(DU,DV) = .04
 MEAN W(M/S) = 3.71
 SD W(M/S) = 2.37
 MEAN MAXW(M/S) = 1.03
 SD MAXW(M/S) = 8.46
 MEAN MAXW(M/S) = 2.72

KSC ,WL GT 500M TRANS 3HR WIND CHANGE 3-9KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	-73	1.98	2.02	1.70	-.460	2.87	1.79	7.51
2	1.42	1.96	-1.38	1.35	.519	2.82	1.28	5.91
3	.85	2.63	-2.26	1.91	-.667	3.35	2.27	10.17
4	.91	1.88	-1.52	1.23	-.195	2.58	1.23	4.86
5	1.26	1.88	1.83	3.93	-.077	3.92	2.92	11.62
6	.79	2.79	.77	2.98	-.656	3.69	2.07	8.85
7	-1.62	2.71	1.25	2.73	.416	3.98	1.76	9.96
8	-1.11	2.09	-3.17	3.12	.018	4.47	2.31	8.26
9	2.46	2.02	1.51	1.55	.241	3.40	1.81	7.57
10	1.36	2.74	3.45	3.00	-.234	5.23	1.69	9.28
11	-.86	.80	-1.32	1.24	.159	1.89	1.03	3.79
12	-2.28	1.82	-.41	1.49	.222	2.74	1.83	9.96
13	-.28	2.64	-1.38	1.59	.228	2.97	1.63	6.70
14	-.96	1.29	2.47	2.40	-.210	3.45	1.60	6.83
15	.55	2.76	-2.60	4.11	-.083	4.20	3.73	13.96
16	1.29	1.79	.27	3.65	-.253	3.82	1.89	9.01
17	-.74	1.68	-.55	1.25	.060	2.14	.79	4.71
18	-5.29	6.02	-.29	1.82	.614	5.91	5.72	16.33
19	2.93	2.55	-.92	2.34	-.623	4.03	2.27	9.85
20	.77	2.80	-2.25	3.84	.462	4.82	2.23	8.81
21	-.94	2.59	-.89	1.94	.495	2.73	2.15	8.35
22	.31	2.15	2.00	2.78	.043	3.67	1.73	7.16
23	-.49	3.50	2.84	2.09	.014	4.57	2.00	8.69
24	-3.11	3.18	-1.26	4.81	.285	6.09	2.71	11.58
25	-.30	2.07	3.59	1.33	-.247	4.21	1.12	6.10
26	.82	2.98	-2.20	2.39	-.005	3.96	2.09	9.36
27	.72	3.00	-3.72	3.53	-.016	5.14	3.06	13.31
28	2.28	3.16	1.65	3.64	-.718	5.02	2.44	12.07
29	-1.25	1.65	-.94	1.42	.175	2.25	1.45	6.65
30	-3.77	3.57	-.87	4.05	.376	5.67	3.45	12.76
31	3.06	2.31	2.52	1.75	.455	4.51	1.94	9.00
32	.24	1.07	3.25	1.48	.028	3.48	1.35	6.21
33	-.33	2.54	.87	2.61	.238	3.32	1.75	6.90
34	.70	2.83	-1.47	2.54	.127	3.69	1.86	8.19
35	-.71	1.67	1.17	1.60	.120	2.44	1.11	4.65
36	2.19	1.59	.57	1.61	-.307	3.01	1.05	4.90
37	.44	1.86	1.84	1.58	-.383	2.84	1.18	4.92
38	.86	1.50	1.10	1.93	.381	2.62	1.03	4.92
39	2.49	1.93	1.07	2.63	-.078	4.06	1.22	6.69
40	1.33	2.82	-.91	1.39	.115	2.84	2.09	8.99
41	-1.51	1.84	3.50	2.97	-.080	4.64	2.28	8.56
42	1.44	2.52	1.46	2.94	-.711	3.81	2.14	8.70
43	.70	2.12	-.25	1.95	.106	2.58	1.48	6.45

MEAN DU(M/S) = .17
 MEAN DV(M/S) = .24
 SD DU(M/S) = 3.02
 SD DV(M/S) = 3.19
 R(DU,DV) = .04
 MEAN W(M/S) = 3.71
 SD W(M/S) = 2.37
 SD MEAN(M/S) = 1.04
 MEAN MAXW(M/S) = 8.35
 SD MAXW(M/S) = 2.76

KSC ,WL GT 1500M , TRANS 3HR WIND CHANGE 3-9KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	-1.76	1.78	2.02	1.58	-.521	2.70	1.74	6.59
2	1.42	1.67	-1.36	1.19	-.551	2.67	.98	4.31
3	.84	2.43	-2.25	1.60	-.724	3.19	2.01	8.70
4	.92	1.77	-1.54	1.02	-.361	2.50	1.06	4.09
5	1.29	1.45	1.85	3.46	-.170	3.69	2.34	8.82
6	.77	2.59	.78	2.80	-.694	3.44	1.96	7.17
7	-1.70	2.52	1.20	2.45	-.596	3.66	1.81	10.48
8	-1.11	1.89	-3.14	3.01	-.010	4.32	2.25	7.38
9	2.49	1.80	1.53	1.24	-.357	3.28	1.60	6.34
10	1.33	2.48	3.46	2.56	-.301	4.93	1.46	7.26
11	-.88	.49	-1.27	1.09	-.081	1.75	.87	3.02
12	-2.30	1.67	-.39	1.18	-.307	2.62	1.65	9.57
13	.32	2.44	-1.35	1.30	-.387	2.66	1.57	5.78
14	-.96	1.15	2.43	2.20	-.228	3.26	1.54	5.81
15	.50	2.52	-2.56	3.77	-.106	3.90	3.49	12.05
16	1.21	1.63	.25	3.48	-.357	3.65	1.71	7.27
17	-.73	1.53	-.54	1.10	-.100	1.94	.79	3.80
18	-5.33	5.75	-.34	1.55	-.731	5.76	5.54	16.35
19	2.93	2.34	-.89	2.11	-.693	3.84	2.12	8.84
20	.79	2.48	-2.21	3.63	-.512	4.39	2.34	7.85
21	-.99	2.44	-.89	1.57	-.476	2.47	2.02	8.58
22	.27	1.95	1.98	2.56	-.002	3.36	1.72	6.31
23	.53	3.36	2.85	1.92	-.044	4.49	1.77	7.72
24	-3.11	3.02	-1.29	4.66	-.289	5.90	2.67	10.62
25	-.32	1.83	3.65	.83	-.451	4.08	.89	5.47
26	.85	2.75	-2.22	2.18	-.012	3.83	1.81	8.28
27	.69	2.82	-3.74	3.36	-.010	5.03	2.90	12.55
28	2.30	2.72	1.63	3.33	-.786	4.71	2.05	10.30
29	-1.22	1.41	-.95	1.19	-.279	2.04	1.27	5.10
30	-3.78	3.25	-.90	3.77	-.492	5.31	3.41	11.89
31	3.04	2.22	2.50	1.39	-.494	4.44	1.61	7.46
32	.26	.95	3.28	1.28	-.061	3.47	1.15	5.54
33	-.31	2.25	.85	2.31	-.310	2.88	1.70	5.79
34	.76	2.29	-1.52	2.32	-.157	3.36	1.49	7.60
35	-.70	1.45	1.18	1.46	-.167	2.20	1.12	4.26
36	2.20	1.10	.58	1.38	-.620	2.83	.49	3.79
37	.47	1.66	1.90	1.52	-.470	2.74	1.17	4.59
38	.84	1.14	1.10	1.81	-.324	2.43	.73	3.75
39	2.48	1.46	1.06	2.57	-.003	3.91	.82	5.13
40	1.36	2.54	-.89	.96	-.267	2.48	1.96	7.90
41	-1.49	1.38	3.53	2.66	-.166	4.31	2.24	7.66
42	1.43	2.36	1.42	2.78	-.762	3.67	1.95	7.56
43	.69	1.76	-.27	1.80	-.162	2.39	1.08	5.89

MEAN DU(M/S) = .17
 MEAN DV(M/S) = .24
 SD DU(M/S) = 2.84
 SD DV(M/S) = 3.01
 R(DU,DV) = .05
 MEAN W(M/S) = 3.50
 SD W(M/S) = 2.23
 SD MEAN(M/S) = 1.03
 MEAN MAXW(M/S) = 7.33
 SD MAXW(M/S) = 2.75

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-.68	1.28	2.01	1.53	-.575	2.43	1.60	5.03
2	1.22	1.40	-1.27	.89	.567	2.19	1.03	3.94
3	.86	2.09	-2.20	.80	-.835	2.90	1.45	6.23
4	1.03	1.48	-1.55	.73	-.697	2.29	.96	4.26
5	1.25	.66	1.83	2.92	-.398	3.25	1.82	7.54
6	.72	1.84	.75	2.67	-.790	2.91	1.75	6.04
7	-1.87	2.55	1.21	2.17	.623	3.35	2.23	10.70
8	-1.12	1.21	-3.08	2.93	.246	4.20	1.76	6.40
9	2.50	1.58	1.51	.90	.607	3.07	1.55	5.94
10	1.43	2.01	3.26	2.12	-.165	4.35	1.51	6.27
11	-1.75	.29	-1.20	.94	-.424	1.58	.69	2.78
12	-2.30	1.45	-.29	1.21	.155	2.65	1.37	7.76
13	.30	2.01	-1.39	.97	.446	2.27	1.36	4.40
14	-.98	1.01	2.50	1.71	-.206	3.01	1.44	5.54
15	-.42	2.25	-2.45	2.98	.033	3.77	2.42	8.35
16	.97	1.73	.17	3.09	-.428	3.40	1.37	6.07
17	-.72	1.47	-.54	.96	.326	1.81	.78	2.94
18	-5.21	5.42	-.44	1.46	.719	5.82	4.99	14.78
19	2.87	2.00	-1.10	1.79	-.638	3.48	2.14	6.96
20	.85	2.05	-2.22	3.49	.559	4.14	2.19	7.87
21	-1.03	2.35	-.85	1.41	.544	2.12	2.18	9.02
22	.17	1.82	1.96	2.44	-.164	3.27	1.56	5.16
23	.55	3.05	2.80	1.37	-.037	4.16	1.40	6.25
24	-2.99	2.71	-1.28	4.27	.376	5.30	2.82	9.76
25	-.37	1.26	3.60	.63	-.444	3.81	.76	5.18
26	.85	2.01	-2.15	1.54	.176	3.19	1.24	5.20
27	.68	2.42	-3.60	2.78	-.009	4.61	2.39	9.59
28	2.18	1.18	1.71	2.24	-.561	3.62	.95	5.33
29	-1.30	.98	-1.00	1.07	.054	1.98	.93	3.72
30	-3.57	3.89	-1.06	3.90	.131	5.21	4.13	12.98
31	2.99	1.87	2.72	1.10	-.146	4.40	1.27	6.27
32	.35	.78	3.19	1.16	-.253	3.32	1.08	4.94
33	-.36	2.04	.85	1.85	.384	2.63	1.24	6.23
34	.67	1.57	-1.58	1.93	.722	2.52	1.66	6.94
35	-.65	1.01	1.16	1.14	.259	1.89	.72	3.04
36	2.10	1.03	.63	1.10	-.862	2.61	.52	3.47
37	.50	1.39	1.96	1.24	-.591	2.53	1.06	4.17
38	1.02	.68	1.24	1.49	.360	2.18	.71	3.65
39	2.49	.95	1.21	2.15	-.256	3.61	.41	5.00
40	1.33	1.94	-.94	.65	.635	2.32	1.20	5.25
41	-1.61	.67	3.46	2.35	-.507	4.02	2.10	7.27
42	1.42	1.56	1.52	2.54	-.930	3.30	1.51	7.02
43	.57	1.82	-.15	1.61	.057	2.27	1.02	4.67

MEAN DU(M/S) = .16
 MEAN DV(M/S) = .25
 SD DU(M/S) = 2.58
 SD DV(M/S) = 2.77
 R(DU, DV) = .09
 MEAN W(M/S) = 3.20
 SD W(M/S) = 2.04
 SD MEAN(M/S) = 1.00
 MEAN MAXW(M/S) = 6.28
 SD MAXW(M/S) = 2.52

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KSC, WL GT 6000M , TRANS 3HR WIND CHANGE 3-9KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-.03	1.23	1.95	1.28	-.846	2.30	1.45	5.08
2	1.82	.51	-1.35	.94	-.565	2.38	.81	3.53
3	1.13	1.15	-2.40	1.06	-.659	2.85	1.16	4.87
4	.94	1.51	-1.38	.255	-.255	2.09	.95	5.21
5	1.49	.63	2.28	1.06	-.678	2.77	1.12	5.08
6	.84	.99	.93	1.52	-.710	2.12	.61	3.15
7	-1.93	3.29	.67	1.85	-.983	3.42	2.59	10.56
8	-1.19	.56	-2.68	2.75	-.745	3.78	1.49	5.24
9	2.28	.97	1.44	.81	-.927	2.73	1.20	4.30
10	2.05	1.10	3.30	1.40	-.757	4.22	.64	5.01
11	-.93	.13	-1.12	.63	-.676	1.51	.51	2.16
12	-2.86	1.32	.24	.30	-.738	2.90	1.30	6.63
13	.32	1.43	-1.31	.39	-.521	1.90	.62	2.92
14	-1.18	.83	2.45	1.38	-.586	2.82	1.44	4.83
15	.07	1.38	-2.54	1.46	-.615	2.88	1.47	5.55
16	.91	1.96	-.17	2.12	-.656	2.97	.57	4.18
17	-.95	.97	-.44	.60	-.858	1.38	.70	2.37
18	-5.81	2.97	-.63	.41	-.051	5.89	2.91	10.55
19	3.17	1.68	-.59	1.17	-.946	3.41	1.71	5.73
20	.57	1.27	-2.31	2.91	-.866	3.44	1.97	6.42
21	-1.09	2.50	-.90	1.54	-.930	2.25	2.36	8.47
22	.16	1.16	2.13	1.75	-.209	2.68	1.33	4.08
23	.89	2.11	3.12	.76	-.090	3.90	.55	4.64
24	-3.46	1.26	-2.13	2.28	-.208	4.70	1.07	6.12
25	-.54	.73	3.86	.47	-.904	3.95	.61	6.01
26	1.05	1.42	-2.59	1.84	-.340	3.39	1.31	4.80
27	.57	1.25	-3.59	2.96	-.739	3.85	2.94	10.71
28	2.26	1.00	2.00	1.38	-.283	3.25	1.20	5.67
29	-1.09	.80	-.75	.88	-.668	1.76	.22	2.21
30	-2.75	2.87	-1.39	3.41	-.086	4.83	2.43	7.65
31	3.22	1.05	2.71	.80	-.273	4.33	.84	5.34
32	.35	.51	3.39	.72	-.563	3.46	.65	4.29
33	-.16	1.55	1.26	1.92	-.357	2.33	1.50	5.19
34	.52	2.15	-1.46	1.68	-.945	2.81	1.38	6.85
35	-.88	.69	1.22	.57	-.605	1.70	.41	2.40
36	2.30	.77	.73	.64	-.856	2.57	.47	3.24
37	.26	1.06	1.98	.52	-.829	2.28	.42	3.19
38	1.02	.22	1.30	.90	-.376	1.86	.36	2.45
39	2.67	.55	1.35	1.58	-.701	3.41	.39	4.52
40	1.30	1.30	-.94	.70	-.833	2.09	.59	3.35
41	-1.69	.45	3.50	1.38	-.663	3.92	1.35	5.68
42	1.86	.69	1.51	1.99	-.314	2.94	1.23	5.38
43	.22	1.36	-.63	.89	-.500	1.58	.77	3.05

MEAN DU(M/S) = .17
 MEAN DV(M/S) = .28
 SD DU(M/S) = 2.30
 SD DV(M/S) = 2.48
 R(DU,DV) = .13
 MEAN W(M/S) = 2.97
 SD W(M/S) = 1.66
 MEAN MAXW(M/S) = .99
 MEAN MAXW(M/S) = 5.09

U-COMPONENT CHANGE

NP	MEAN	STD.DEV.
1	-0.76	1.07
2	1.68	.48
3	1.11	.79
4	1.36	1.93
5	1.69	.87
6	1.07	.38
7	-2.59	3.25
8	-1.22	.29
9	2.40	.72
10	2.18	.42
11	-0.75	.24
12	-3.02	.22
13	.51	1.19
14	-0.97	.75
15	-0.05	1.09
16	.44	1.95
17	-0.88	.72
18	-5.38	1.75
19	3.13	1.30
20	.71	.78
21	-1.48	2.59
22	-0.02	1.15
23	.83	1.24
24	-3.31	.40
25	-0.77	.98
26	.44	1.13
27	.94	1.04
28	2.31	1.16
29	-1.16	.21
30	-2.30	2.21
31	3.20	.61
32	.29	.49
33	-0.23	1.29
34	.18	2.08
35	-0.98	.62
36	2.26	.49
37	.45	1.21
38	1.06	.24
39	2.73	.18
40	1.34	.93
41	-1.73	.25
42	2.34	.52
43	.10	.61

MEAN DU(M/S)= .17
 MEAN DV(M/S)= .28
 SD DU(M/S)= 2.17
 SD DV(M/S)= 2.40
 R(DU,DV)= .14
 MEAN W(M/S)= 2.87
 SD W(M/S)= 1.53
 SD MEAN(M/S)= .98
 MEAN MAXW(M/S)= 4.54
 SD MAXW(M/S)= 1.97

V-COMPONENT CHANGE

STD.DEV.	MEAN
1.47	2.11
.51	-1.29
1.49	-2.10
.44	-1.43
.67	2.23
.81	1.00
1.85	.46
1.54	-2.52
.49	1.38
1.16	3.18
.33	-1.16
.58	.29
.21	-1.51
.92	2.46
1.12	-2.79
1.03	-.38
.41	-.40
.18	-.57
.51	-.51
2.33	-2.67
1.90	-1.18
1.39	2.10
.85	3.11
1.42	-2.31
.73	3.98
2.74	-2.01
3.26	-4.08
1.08	2.13
.80	-.73
2.19	-1.42
1.12	2.90
.54	3.36
1.08	1.57
1.82	-1.83
.33	1.22
.38	.80
.20	2.08
.41	1.15
1.44	1.43
.51	-.97
1.15	3.86
1.46	1.68
.79	-.45

VECTOR WIND CHANGE

R	MEAN	STD.DEV.	MAX
-.981	2.41	1.59	5.42
-.683	2.14	.63	2.85
-.207	2.74	.96	4.12
-.919	2.35	1.52	6.01
.822	2.83	1.02	4.46
-.887	1.70	.26	2.27
.975	3.82	2.50	9.49
.838	2.93	1.32	4.27
.887	2.78	.85	3.77
-.625	3.98	.72	4.78
.562	1.40	.35	1.94
.209	3.09	.20	3.36
1.93	1.93	.54	2.76
.035	2.75	.91	3.72
.766	2.95	1.24	5.00
-.634	2.11	.84	3.65
.596	1.16	.53	1.82
-.063	5.41	1.74	8.03
-.897	3.20	1.33	4.73
.804	3.35	1.57	5.38
.977	2.74	2.52	8.44
-.799	2.57	1.02	4.26
.090	3.47	.75	4.44
-.372	4.25	.67	5.27
-.968	4.13	.94	6.40
-.811	3.39	1.21	5.36
-.956	4.24	3.36	10.43
.841	3.20	1.46	5.40
-.591	1.55	.40	2.84
-.464	4.05	.75	4.99
-.324	4.43	.81	5.51
-.782	3.42	.46	3.88
-.875	2.05	1.06	3.77
.991	2.97	1.46	6.40
.815	1.70	.26	2.35
-.514	2.45	.39	2.94
-.754	2.43	.37	3.62
.063	1.60	.33	1.82
.662	3.33	.71	5.02
.850	1.93	.36	2.60
-.717	4.25	1.11	5.43
.158	3.11	1.01	4.44
.599	1.08	.22	1.63

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KSC UNFILTERED TRANS 3HR WIND CHANGE 9-16 KM

N/P	U-COMPONENT CHANGE		V-COMPONENT CHANGE		VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.	MEAN	STD. DEV.	
1	-1.04	2.47	4.90	2.36	-0.304	5.59	10.92
2	-2.75	3.49	-1.28	2.48	-0.451	4.64	9.50
3	-3.35	2.42	3.20	3.87	-0.004	5.10	9.78
4	5.43	3.89	-2.47	4.22	-0.489	7.37	17.75
5	2.80	3.08	1.11	3.85	-0.301	5.26	11.22
6	-90	3.04	-90	3.50	-0.210	4.36	9.08
7	-6.50	4.31	-1.45	5.28	-0.466	8.89	15.50
8	.95	4.88	-4.04	3.68	-0.247	6.15	17.91
9	1.63	2.79	.37	1.71	-0.398	3.04	9.37
10	-92	3.60	-15	3.26	-0.114	4.49	9.40
11	-1.39	1.84	-37	1.80	-0.596	2.48	6.80
12	-3.36	2.16	-29	2.20	-0.383	4.05	9.97
13	.68	3.24	-71	3.00	-0.056	4.12	8.15
14	1.25	3.28	1.43	2.98	-0.064	4.33	11.03
15	-1.31	4.71	.00	3.64	-0.549	5.35	12.18
16	-1.72	4.05	.55	3.20	-0.393	5.02	8.91
17	.07	1.49	1.10	2.44	-0.075	2.41	9.36
18	-2.59	1.09	-03	2.63	-0.379	3.65	6.75
19	1.39	3.42	-2.06	4.01	-0.423	5.25	10.87
20	-82	2.92	-53	3.53	-0.144	4.29	8.00
21	-5.28	2.91	-3.63	3.85	-0.746	7.29	13.25
22	-1.61	2.74	3.09	3.61	-0.389	5.16	12.21
23	-08	2.74	-2.71	4.18	-0.287	5.06	11.09
24	-5.61	3.85	10.91	7.02	-0.067	13.61	21.45
25	-1.62	3.13	5.15	2.40	-0.192	6.26	11.25
26	1.65	6.85	5.64	7.34	-0.015	10.36	18.37
27	.37	3.78	-7.31	5.17	-0.433	8.65	18.12
28	2.26	3.02	1.27	1.66	-0.053	3.91	7.36
29	-2.74	3.75	-3.31	2.59	-0.177	5.54	12.95
30	2.95	7.18	-1.12	6.83	-0.384	9.02	22.47
31	-78	2.52	4.47	3.47	-0.183	5.75	9.24
32	.45	1.48	1.89	3.23	-0.175	3.70	6.39
33	-3.07	4.36	-1.52	5.42	-0.406	7.01	16.53
34	-2.18	3.63	-2.66	3.88	-0.293	5.83	9.64
35	-93	1.88	1.22	1.57	-0.157	2.54	6.03
36	.14	2.47	.72	1.77	-0.032	2.76	7.04
37	2.46	2.28	2.71	1.43	-0.018	4.22	7.30
38	.27	3.70	.22	2.87	-0.222	4.18	9.01
39	2.81	2.10	3.87	2.28	-0.102	5.37	9.72
40	-08	1.86	-52	3.12	-0.319	3.13	7.33
41	-51	2.77	.09	4.32	-0.078	4.37	11.54
42	-5.75	8.91	2.47	4.02	-0.393	8.98	23.84
43	1.90	4.07	-1.47	3.14	-0.130	5.17	9.99

MEAN DU(M/S) = -.57
 MEAN DV(M/S) = .46
 SD DU(M/S) = 4.42
 SD DV(M/S) = 4.82
 R(DU,DV) = .00
 MEAN W(M/S) = 5.43
 SD W(M/S) = 3.71
 SD MEAN(M/S) = 2.27
 MEAN MAXW(M/S) = 11.50
 SD MAXW(M/S) = 4.48

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KSC, WL GT 500M, TRANS 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	-1.04	2.46	2.35	3.20	-.320	5.60	2.32	10.80
2	-2.75	3.51	2.46	3.46	-.461	4.65	2.45	9.44
3	-3.35	2.39	3.86	3.86	-.013	5.05	2.33	9.76
4	5.43	3.89	4.24	4.24	-.492	7.37	3.78	17.81
5	2.80	3.08	3.85	3.85	-.307	5.26	2.38	11.01
6	-.90	3.04	3.50	3.50	-.220	4.38	1.97	9.08
7	-6.51	4.30	5.27	5.27	-.463	8.90	3.36	15.50
8	1.95	4.93	3.67	3.67	-.249	6.17	4.09	17.72
9	1.64	2.79	1.66	1.66	-.413	3.00	2.07	9.08
10	-.91	3.58	3.22	3.22	-.118	4.48	1.97	9.07
11	-1.39	1.85	1.75	1.75	-.609	2.45	1.59	6.47
12	-3.36	2.13	2.19	2.19	-.392	4.05	2.08	9.52
13	.67	3.27	3.01	3.01	-.053	4.15	1.86	8.24
14	1.25	3.30	2.98	2.98	-.059	4.34	2.12	10.51
15	-1.31	4.73	3.62	3.62	-.554	5.36	2.89	12.43
16	-1.72	4.02	3.20	3.20	-.403	5.02	2.12	9.00
17	.06	1.47	2.43	2.43	-.049	2.40	1.88	8.87
18	-2.59	1.06	2.59	2.59	-.413	3.63	1.17	6.68
19	1.39	3.41	3.98	3.98	-.421	5.21	2.53	10.53
20	-.82	2.89	3.52	3.52	-.145	4.28	1.84	8.18
21	-5.27	2.90	3.82	3.82	-.762	7.27	3.33	13.00
22	-1.61	2.73	3.56	3.56	-.389	5.14	2.43	11.87
23	-.07	2.70	4.12	4.12	-.315	5.01	2.55	10.65
24	-5.61	3.86	7.03	7.03	-.073	13.62	5.42	21.24
25	-1.63	3.12	2.39	2.39	-.181	6.26	2.35	11.17
26	1.66	6.86	7.37	7.37	-.015	10.35	5.31	18.79
27	.36	3.76	5.12	5.12	-.440	8.58	4.49	17.64
28	2.27	3.00	1.63	1.63	-.060	3.90	1.79	7.27
29	-2.74	3.74	2.96	2.96	-.168	5.54	2.87	12.63
30	2.96	7.22	6.87	6.87	-.384	9.07	5.18	22.42
31	-.78	2.50	3.47	3.47	-.192	5.74	2.43	9.25
32	.45	1.47	3.22	3.22	-.190	3.71	1.59	6.27
33	-3.07	4.37	5.44	5.44	-.399	7.02	3.32	16.23
34	-2.18	3.62	3.88	3.88	-.285	5.83	2.45	9.55
35	-.93	1.86	1.50	1.50	-.157	2.47	1.40	6.26
36	.14	2.47	1.76	1.76	-.029	2.76	1.43	6.75
37	2.46	2.21	1.37	1.37	-.072	4.17	1.67	7.14
38	.27	3.71	2.85	2.85	-.223	4.18	2.13	8.50
39	2.80	2.08	2.26	2.26	-.099	5.35	1.91	9.41
40	-.08	1.81	3.10	3.10	-.336	3.09	1.90	7.21
41	-.51	2.80	4.34	4.34	-.086	4.37	2.78	11.81
42	-5.76	8.95	4.03	4.03	-.395	8.99	7.39	23.72
43	1.90	4.06	3.11	3.11	-.132	5.15	2.31	10.01

MEAN DU(M/S) = -.57
 MEAN DV(M/S) = .46
 SD DU(M/S) = 4.42
 SD DV(M/S) = 4.81
 R(DU,DV) = .00
 MEAN W(M/S) = 5.43
 SD W(M/S) = 3.71
 SD MEAN(W/S) = 2.28
 MEAN MAXW(M/S) = 11.36
 SD MAXW(M/S) = 4.49

KSC, WL GT 1500M, TRANS 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		MEAN	V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.		STD.DEV.	MEAN		STD.DEV.		
1	-0.98	2.25	4.94	2.20	-0.260	5.53	2.17	9.41	
2	-2.72	3.27	-1.32	1.84	-0.530	4.37	2.02	8.44	
3	-0.28	1.76	3.25	3.55	-0.019	4.51	2.43	9.15	
4	5.41	3.73	-2.53	3.94	-0.529	7.18	3.67	15.68	
5	2.75	2.80	1.14	3.53	-0.317	4.95	2.16	8.90	
6	-0.84	2.15	0.90	3.19	-0.255	3.70	1.62	7.76	
7	-6.43	4.12	-1.45	4.87	-0.505	8.61	3.14	14.68	
8	0.91	4.50	-3.99	3.20	-0.162	5.94	3.44	14.22	
9	1.64	2.51	0.33	1.15	-0.571	2.60	1.90	7.35	
10	-0.81	3.24	-0.13	2.73	-0.240	4.12	1.26	7.17	
11	-1.38	1.59	-0.38	1.32	-0.675	2.06	1.43	5.85	
12	-3.35	1.58	-0.24	1.87	-0.310	3.87	1.51	6.73	
13	0.61	2.80	-0.76	2.64	-0.076	3.63	1.58	6.61	
14	1.23	2.95	1.42	2.32	-0.108	3.79	1.78	7.65	
15	-1.22	4.45	-0.01	3.35	-0.621	5.12	2.47	9.46	
16	-1.68	3.65	-0.52	2.86	-0.547	4.58	1.89	9.00	
17	0.05	1.13	1.06	2.13	-0.191	2.17	1.49	5.74	
18	-2.58	0.88	-0.03	2.10	-0.492	3.35	0.77	5.17	
19	1.37	2.90	-2.11	3.41	-0.499	4.65	2.18	9.74	
20	-0.83	2.57	-0.54	3.34	-0.147	4.03	1.56	7.14	
21	-5.22	2.64	-3.59	3.57	-0.867	7.03	3.24	11.67	
22	-1.60	2.39	3.16	2.94	-0.390	4.62	2.34	8.99	
23	-0.16	2.11	-2.72	3.43	-0.491	4.09	2.63	9.96	
24	-5.56	3.62	10.89	6.78	-0.099	13.39	5.40	20.18	
25	-1.65	2.84	5.13	1.96	-0.144	6.06	2.04	10.50	
26	1.57	6.32	5.63	7.11	-0.003	9.98	4.98	18.22	
27	0.35	3.47	-7.31	4.54	-0.556	8.29	4.17	16.89	
28	2.29	2.73	1.29	1.26	-0.143	3.54	1.85	6.30	
29	-2.76	3.39	-3.28	2.23	-0.124	5.32	2.56	10.84	
30	2.97	6.61	-1.13	6.56	-0.422	8.57	4.82	20.93	
31	-0.79	2.30	4.40	3.37	-0.231	5.56	2.37	9.79	
32	0.44	1.24	1.89	3.05	-0.308	3.53	1.46	6.27	
33	-3.12	3.76	-1.50	5.22	-0.435	6.64	3.00	14.05	
34	-2.21	3.22	-2.64	3.69	-0.381	5.38	2.61	8.97	
35	-0.93	1.68	1.18	1.12	-0.022	2.21	1.19	4.69	
36	0.11	2.03	0.73	1.56	-0.122	2.38	1.20	4.96	
37	2.47	1.92	2.68	1.03	-0.279	3.94	1.59	6.52	
38	0.31	3.04	0.21	2.43	-0.305	3.59	1.53	7.14	
39	2.77	1.79	3.92	1.77	-0.009	5.17	1.61	7.91	
40	-0.04	1.59	-0.45	2.68	-0.190	2.71	1.59	6.83	
41	-0.44	2.58	0.16	3.99	-0.055	4.23	2.18	10.39	
42	-5.73	8.56	2.52	3.73	-0.443	8.56	7.27	23.76	
43	1.93	3.80	-1.46	2.67	-0.215	4.81	2.05	8.56	

MEAN DU(M/S) = -0.56
 MEAN DV(M/S) = 0.46
 SD DU(M/S) = 4.13
 SD DV(M/S) = 4.56
 R(DU,DV) = -0.01
 MEAN W(M/S) = 5.08
 SD W(M/S) = 3.55
 MEAN MAXW(M/S) = 10.00
 SD MAXW(M/S) = 4.53

KSC. WL GT 3000M. TRANS 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE			V-COMPONENT CHANGE			R	VECTOR WIND CHANGE			MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	MAX	
1	-1.01	1.74	4.85	2.09	-1.190	1.12		5.24	2.12	8.87	
2	-2.55	2.79	-1.36	1.34	.710	1.63		3.88	1.69	6.51	
3	-2.25	1.07	3.23	3.20	-1.165	2.38		4.02	3.66	13.87	
4	5.22	3.42	-2.57	3.79	-1.531	3.66		6.82	3.97	7.81	
5	2.79	1.86	1.04	2.67	-1.379	1.91		3.18	1.23	6.00	
6	-8.1	1.47	-1.51	2.83	-1.336	3.09		8.07	3.09	13.99	
7	-6.30	3.84	-1.51	4.24	-1.569	2.60		4.56	2.60	9.16	
8	.84	2.89	-3.81	1.99	-1.199	1.60		2.37	1.60	5.80	
9	1.66	2.20	.35	.70	-1.782	1.08		3.42	1.08	5.20	
10	-8.1	2.65	-1.14	2.29	-1.429	1.11		1.76	1.11	4.45	
11	-1.32	1.21	-4.3	.97	.733	.93		3.64	.93	5.16	
12	-3.38	1.13	-3.2	1.16	-1.202	.81		2.23	.81	3.92	
13	.65	1.44	-7.5	1.61	-1.384	5.51		2.84	1.37	5.51	
14	1.25	2.08	1.42	1.45	-1.465	8.85		4.69	2.39	6.62	
15	-1.05	3.97	-0.6	3.30	-1.702	1.13		4.08	1.13	3.57	
16	-1.45	3.07	.57	2.48	-1.595	.93		1.79	.93	3.78	
17	.08	.56	1.04	1.63	-1.253	.44		2.86	.44	6.90	
18	-2.56	.39	.07	1.30	-1.077	.89		4.18	1.26	6.68	
19	1.34	2.54	-1.97	2.63	-1.698	11.13		3.56	3.13	7.56	
20	-8.6	2.31	-5.2	2.68	-1.272	7.96		6.73	1.97	18.88	
21	-5.10	2.42	-3.48	3.34	-1.969	9.31		4.30	1.79	16.25	
22	-1.49	1.81	3.13	2.68	-1.480	14.91		3.35	4.13	6.02	
23	-3.1	1.15	-2.79	2.77	-1.529	1.80		13.19	3.79	9.76	
24	-5.63	2.96	10.77	6.24	-1.108	2.60		5.91	4.81	16.27	
25	-1.65	2.50	5.16	1.58	-1.362	8.03		9.69	1.84	8.50	
26	1.58	5.90	5.72	6.42	-1.021	5.20		7.05	1.44	5.20	
27	.41	2.80	-7.37	4.07	-1.620	2.76		3.21	2.90	7.95	
28	2.27	2.28	1.24	1.31	-1.547	3.63		5.96	.95	3.63	
29	-2.65	2.90	-3.16	2.11	-1.264	3.93		4.81	1.83	6.50	
30	2.71	4.88	-1.03	5.76	-1.504	3.99		7.05	1.44	6.88	
31	-6.9	2.04	4.17	2.42	-1.329	1.31		4.94	1.31	2.75	
32	.35	.92	1.91	2.79	-1.263	1.60		3.21	1.60	6.40	
33	-3.01	2.95	-1.40	4.84	-1.637	4.37		5.96	2.76	7.29	
34	-2.23	2.70	-2.47	3.19	-1.593	4.37		4.48	2.90	7.95	
35	-1.01	1.31	.99	1.04	-1.353	1.97		1.97	.95	3.63	
36	.22	1.40	.74	1.28	-1.353	1.83		1.83	.92	3.93	
37	2.47	1.68	2.56	.81	-1.469	1.44		3.75	1.44	6.50	
38	.18	2.05	.12	1.49	-1.038	2.38		2.38	.89	3.99	
39	2.73	1.33	3.88	1.21	-1.112	4.90		4.90	1.31	6.88	
40	-.02	1.01	-.39	1.34	-1.131	1.60		1.60	.64	2.75	
41	-.43	1.56	.08	3.40	-1.104	3.45		3.45	1.49	6.51	
42	-5.58	7.98	2.59	3.39	-1.526	8.48		8.48	6.40	21.44	
43	1.98	3.44	-1.45	2.31	-1.448	4.37		4.37	1.99	7.29	

MEAN DU(M/S) = -.54
 MEAN DV(M/S) = .45
 SD DU(M/S) = 3.67
 SD DV(M/S) = 4.20
 R(DU,DV) = -.02
 MEAN W(M/S) = 4.53
 SD W(M/S) = 3.33
 MEAN MAXW(M/S) = 2.36
 SD MAXW(M/S) = 8.24
 MEAN MAXW(M/S) = 4.31

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KSC, WL GT 6000M, TRANS 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	-1.11	1.06	4.96	1.66	-.520	5.16	1.77	7.41
2	-2.99	1.58	-1.42	1.04	.483	3.53	1.44	4.95
3	-3.35	.76	3.81	1.85	.168	3.97	1.69	6.81
4	5.58	1.94	-3.26	1.92	-.675	6.58	2.42	10.21
5	2.87	.96	.73	.87	-.287	3.06	1.05	4.92
6	-.79	1.08	.92	1.53	.411	2.06	.86	3.87
7	-6.03	3.82	-1.42	2.56	-.895	7.05	3.12	11.31
8	.95	1.79	-4.21	1.05	-.460	4.62	1.25	6.45
9	2.10	1.19	.41	.66	-.568	2.31	1.06	4.07
10	-.95	2.00	-.08	2.15	-.910	2.79	1.31	4.92
11	-1.11	.63	-.43	.67	.566	1.36	.64	2.38
12	-3.55	.72	-.38	.94	.492	3.69	.71	4.67
13	.80	1.29	-.85	1.08	-.869	1.78	.99	2.95
14	1.39	1.37	1.41	.76	.254	2.26	1.14	3.91
15	-.55	2.39	-.13	3.23	.951	3.75	1.51	6.68
16	-1.32	3.20	.75	1.55	.454	3.80	.72	5.70
17	-.17	.56	.89	1.34	-.366	1.57	.66	2.74
18	-2.32	.46	.32	.65	-.120	2.44	.42	2.90
19	1.15	1.47	-2.23	1.33	.690	3.08	.86	4.20
20	-.82	2.22	-.59	2.58	-.582	3.27	1.38	6.02
21	-5.22	2.45	-3.50	3.27	.995	6.80	3.16	10.27
22	-1.64	1.18	3.29	1.84	-.276	3.86	1.85	6.07
23	-.38	.87	-3.16	2.08	.856	3.60	1.50	5.66
24	-5.31	1.44	11.37	6.06	-.397	13.07	5.03	19.03
25	-1.81	2.02	5.19	.78	-.348	5.80	1.11	7.73
26	1.51	3.88	6.32	5.26	-.157	8.22	4.15	13.17
27	.63	2.08	-7.64	3.49	-.938	7.97	3.43	13.02
28	2.14	2.12	1.09	1.84	.952	3.33	1.60	5.71
29	-3.03	1.02	-3.60	1.17	.577	4.76	1.37	6.82
30	2.14	2.64	-.98	1.67	-.448	3.43	1.88	7.22
31	-.79	1.76	4.22	1.49	-.384	4.66	1.42	6.36
32	.21	.75	1.93	1.51	-.817	2.44	.83	3.46
33	-3.29	2.64	-1.83	3.35	-.598	5.16	2.37	8.82
34	-2.19	2.10	-2.64	3.41	-.836	4.58	2.59	7.64
35	-1.08	.89	.65	1.03	-.634	1.74	.64	2.89
36	.10	.73	.87	.84	-.705	1.22	.72	2.63
37	2.45	1.58	2.64	.47	.246	3.80	1.13	5.40
38	.32	1.59	.08	.88	.153	1.74	.63	2.97
39	2.86	.70	3.91	.81	.595	4.87	.96	6.20
40	-.15	1.06	-.05	.56	-.015	1.10	.49	2.01
41	-.57	.92	.31	2.91	-.719	2.95	1.00	4.47
42	-6.02	5.77	2.84	1.06	-.031	7.84	4.15	15.08
43	2.52	2.04	-1.15	1.36	-.038	3.33	1.60	5.54

MEAN DU(M/S) = -.55
 MEAN DV(M/S) = .45
 SD DU(M/S) = 3.17
 SD DV(M/S) = 3.86
 R(DU,DV) = -.03
 MEAN W(M/S) = 4.06
 SD W(M/S) = 2.99
 MEAN MAXW(M/S) = 2.33
 SD MAXW(M/S) = 6.40

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	STD.DEV.	STD.DEV.		MEAN	STD.DEV.	
1	-1.07	.71	1.72	1.72	-.790	4.93	1.80	6.95
2	-3.00	1.41	.95	.95	-.228	3.46	1.20	4.65
3	1.15	.83	.96	.96	-.648	3.56	.86	4.84
4	5.76	.79	1.27	1.27	-.661	6.91	1.28	9.80
5	2.86	.59	.94	.94	.839	3.05	.67	4.39
6	-.59	.78	1.05	1.05	.612	1.54	.69	2.74
7	-5.79	2.97	1.60	1.60	.941	6.11	3.12	9.96
8	-.72	1.18	.63	.63	-.632	4.77	.74	5.77
9	2.31	.80	.34	.34	-.537	2.42	.72	3.35
10	-.59	1.49	1.39	1.39	.939	2.01	.76	3.81
11	-1.33	.48	.41	.41	.894	1.46	.58	2.22
12	-3.72	.28	.66	.66	.840	3.78	.28	4.16
13	-.86	.92	.75	.75	-.955	1.32	1.02	2.76
14	1.11	.85	.66	.66	.793	1.98	.95	3.04
15	-.29	1.87	3.07	3.07	.977	3.31	1.42	5.38
16	-.77	3.02	.98	.98	-.008	3.27	.80	5.13
17	-.14	.67	.92	.92	-.846	1.32	.35	1.81
18	-2.50	.36	.62	.62	.988	2.63	.18	3.23
19	1.27	.77	.92	.92	.340	2.75	.72	3.59
20	-1.19	2.10	1.94	1.94	-.884	2.85	1.37	4.97
21	-5.04	2.00	2.77	2.77	-.996	6.28	2.77	9.32
22	-1.51	.84	1.71	1.71	-.780	3.71	1.84	5.61
23	-.22	.45	1.66	1.66	.929	3.28	1.36	4.41
24	-5.41	1.06	5.14	5.14	-.739	12.92	4.60	17.84
25	-1.79	1.29	.44	.44	-.288	5.86	.54	6.80
26	1.46	2.25	2.91	2.91	.011	6.65	2.93	9.83
27	.55	1.57	2.58	2.58	-.960	7.70	2.62	11.25
28	1.98	2.05	2.52	2.52	.983	3.54	1.55	5.61
29	-2.82	.77	.71	.71	.830	4.65	.97	6.07
30	1.57	1.56	.82	.82	-.602	2.38	1.31	4.98
31	-.46	1.29	1.17	1.17	.156	4.41	1.18	5.70
32	-.30	.71	1.24	1.24	-.961	2.42	.93	3.95
33	-3.09	2.25	1.93	1.93	.699	4.04	2.14	6.90
34	-2.06	1.23	3.13	3.13	.913	4.05	2.15	6.85
35	-.94	1.07	1.06	1.06	-.951	1.71	.67	2.56
36	.25	.64	.43	.43	-.821	1.17	.25	1.55
37	2.58	.70	.30	.30	.092	3.75	.54	4.63
38	-.26	1.37	.82	.82	.732	1.53	.52	2.58
39	2.95	.42	.32	.32	.485	5.10	.44	5.73
40	.06	.76	.29	.29	-.246	.77	.35	1.66
41	-.76	.60	2.39	2.39	-.942	2.36	1.07	4.59
42	-5.84	3.58	.49	.49	-.178	6.96	2.86	11.66
43	2.46	1.13	.72	.72	-.243	2.86	1.13	4.30

MEAN DU(M/S) = -.49
 MEAN DV(M/S) = .45
 SD DU(M/S) = 2.83
 SD DV(M/S) = 3.62
 R(DU,DV) = -.08
 MEAN W(M/S) = 3.76
 SD W(M/S) = 2.73
 SD MEAN(M/S) = 2.27
 MEAN MAXW(M/S) = 5.51
 SD MAXW(M/S) = 3.18

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KSC UNFILTERED SUMMER 3HR WIND CHANGE 3-9KM					V-COMPONENT CHANGE			VECTOR WIND CHANGE			MAX	
NP	MEAN	STD.DEV.	MEAN	STD.DEV.	R	MEAN	STD.DEV.	MEAN	STD.DEV.			
1	-1.68	1.62	2.19	1.79	.156	3.41	1.34	6.17				
2	1.76	.88	.17	1.53	.046	2.33	.89	5.27				
3	2.35	2.94	.34	2.34	.234	4.05	1.81	9.14				
4	-1.21	.74	1.92	2.32	.092	2.86	1.21	4.60				
5	-1.04	1.91	-.56	1.40	.474	2.23	1.42	5.08				
6	-1.45	1.34	.92	2.79	.580	3.28	1.33	6.22				
7	-1.23	1.37	1.30	2.39	.144	3.09	1.13	5.70				
8	-1.18	3.19	.87	2.24	.719	3.67	1.56	7.49				
9	-.50	1.38	-1.15	1.73	.334	2.00	1.58	5.78				
10	-.67	2.54	-.40	1.17	.213	2.37	1.67	7.36				
11	1.14	1.48	1.98	1.22	.184	2.76	1.12	4.52				
12	-.24	3.31	-.33	1.98	.208	3.69	1.19	5.95				
13	1.36	1.48	-1.17	1.61	.002	2.68	.91	4.85				
14	-1.87	1.15	1.28	1.80	.231	2.87	1.18	6.18				
15	-.24	1.69	-.87	2.30	.009	2.75	1.18	6.92				
16	-.63	2.08	.74	2.62	.571	3.12	1.54	6.14				
17	-.71	1.87	.12	1.56	.179	2.23	1.20	5.69				
18	-1.26	4.06	-.59	2.84	.330	4.69	2.09	9.83				
19	-.24	1.99	-.09	1.43	.429	2.19	1.11	4.26				
20	-1.68	2.35	-.15	1.55	.576	2.86	1.61	6.99				
21	-.36	1.53	-.59	1.47	.613	1.76	1.37	7.71				
22	-.05	1.57	.13	2.34	.526	2.49	1.32	6.74				
23	-.38	1.89	.60	1.43	.331	2.27	.99	4.61				
24	-.55	.76	-.51	1.21	.631	1.43	.73	3.05				
25	-.47	1.00	1.31	1.68	.326	2.26	.79	4.06				
26	-1.16	2.00	-.75	1.95	.233	2.90	1.14	5.49				
27	-.16	1.30	-.06	2.72	.306	2.56	1.59	6.59				
28	-.79	1.63	.37	2.30	.233	2.71	1.16	5.76				
29	1.61	1.22	.42	1.80	.387	2.54	1.02	4.52				
30	3.69	2.43	-2.74	3.03	.284	5.63	2.11	10.88				
31	-1.99	2.42	-2.07	2.26	.376	4.08	1.61	7.75				
32	-.72	2.09	.12	1.76	.467	2.54	1.24	5.92				
33	1.22	1.90	-.74	1.62	.850	2.55	1.32	5.03				
34	-1.00	2.01	-1.69	2.02	.100	2.96	1.78	6.37				
35	-1.40	1.43	.21	1.61	.073	2.31	1.13	4.58				
36	-4.67	3.38	-.92	5.23	.527	6.96	3.60	13.86				
37	.57	1.74	.53	2.78	.174	3.09	1.34	5.99				
38	-1.39	2.15	-.77	2.18	.565	2.92	1.82	7.30				
39	-.09	2.07	1.07	1.50	.404	2.44	1.32	6.27				
40	-.21	1.29	-.48	1.19	.417	1.71	.66	3.71				
41	-.30	2.06	-.28	2.02	.123	2.60	1.31	5.78				
42	.75	1.52	-.20	1.91	.091	2.46	.73	4.14				
43	.77	.89	.15	.80	.293	1.33	.54	2.75				
44	-1.47	3.15	1.43	1.90	.002	3.77	1.86	8.43				
45	-.92	1.20	-.95	2.30	.008	2.65	1.21	5.74				
46	1.10	1.72	-.58	1.73	.449	2.54	1.01	4.81				
47	-.72	1.69	2.00	1.60	.011	2.97	1.05	5.24				
48	-1.35	1.89	1.75	1.75	.519	2.34	1.33	5.84				
49	-.09	1.26	-.21	1.34	.307	2.02	.80	3.72				
50	.52	1.02	-.05	1.02	.268	1.38	.66	2.98				

MEAN DU(M/S) = -.22
 MEAN DV(M/S) = .10
 SD DU(M/S) = 2.36
 SD DV(M/S) = 2.30
 R(DU,DV) = -.06
 MEAN W(M/S) = 2.83
 SD W(M/S) = 1.71
 SD MEAN(W/S) = .99
 MEAN MAXW(M/S) = 6.00
 SD MAXW(M/S) = 2.00

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		VECTOR WIND CHANGE		R	V-COMPONENT CHANGE		VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	MEAN	STD.DEV.	
1	-1.68	1.61	2.19	1.79	1.60	1.36	.160	3.40	1.36	6.20		
2	1.76	.86	.17	1.51	.080	.88	.080	2.32	1.77	5.42		
3	2.35	2.93	.34	2.35	.236	.77	.236	4.07	1.77	9.07		
4	-.21	.71	1.92	2.31	.099	1.20	.099	2.85	1.20	4.49		
5	-1.05	1.91	-.56	1.39	.474	5.02	.474	2.23	1.41	5.02		
6	-1.45	1.33	.93	2.79	.592	1.34	.592	3.27	1.34	6.16		
7	-1.24	1.33	1.30	2.41	.156	5.77	.156	3.09	1.11	5.77		
8	-.17	3.19	.87	2.24	-.722	7.32	-.722	3.69	1.53	7.32		
9	-.50	1.38	-1.16	1.71	.331	5.73	.331	1.98	1.58	5.73		
10	-.66	2.53	-.40	1.15	-.209	7.31	-.209	2.35	1.67	7.31		
11	1.14	1.46	1.97	1.19	.192	4.48	.192	2.73	1.12	4.48		
12	-.24	3.31	-.33	1.97	-.204	5.87	-.204	3.68	1.18	5.87		
13	1.36	1.48	-1.16	1.61	-.010	4.81	-.010	2.68	.89	4.81		
14	-1.87	1.10	1.28	1.78	-.245	6.12	-.245	2.85	1.18	6.12		
15	-.23	1.67	-.87	2.30	.011	7.14	.011	2.75	1.15	7.14		
16	.63	2.08	.73	2.61	-.586	6.07	-.586	3.10	1.55	6.07		
17	-.71	1.87	.12	1.56	.181	5.56	.181	2.23	1.22	5.56		
18	-1.26	4.06	-.59	2.84	.338	9.50	.338	4.70	2.08	9.50		
19	-.24	1.98	-.09	1.43	-.447	4.18	-.447	2.19	1.11	4.18		
20	-1.68	2.34	-.15	1.52	-.597	6.64	-.597	2.84	1.59	6.64		
21	-.37	1.52	-.58	1.44	.609	7.49	.609	1.73	1.36	7.49		
22	-.05	1.56	.13	2.34	.537	6.57	.537	2.49	1.31	6.57		
23	-.38	1.90	.60	1.43	.343	4.53	.343	2.28	.97	4.53		
24	-.55	.72	-.51	1.18	.651	2.76	.651	1.40	.73	2.76		
25	-.47	.96	1.31	1.67	.323	4.10	.323	2.25	.76	4.10		
26	-1.16	2.02	-.75	1.93	.229	5.29	.229	2.90	1.13	5.29		
27	-.17	1.28	-.05	2.71	-.316	6.73	-.316	2.56	1.57	6.73		
28	-.78	1.61	.37	2.30	.228	5.75	.228	2.69	1.16	5.75		
29	1.62	1.16	.42	1.78	.393	4.34	.393	2.51	.99	4.34		
30	3.69	2.42	-2.74	3.03	-.298	10.72	-.298	5.63	2.09	10.72		
31	-1.99	2.42	-2.07	2.27	.369	7.78	.369	4.08	1.60	7.78		
32	-.72	2.08	.11	1.73	.503	5.77	.503	2.52	1.22	5.77		
33	1.22	1.87	-.74	1.60	-.856	5.16	-.856	2.53	1.30	5.16		
34	-1.00	1.98	-1.69	2.02	.089	6.29	.089	2.93	1.79	6.29		
35	-1.40	1.41	.21	1.59	.074	4.59	.074	2.30	1.11	4.59		
36	-4.66	3.38	-.93	5.24	-.523	13.79	-.523	6.96	3.59	13.79		
37	.57	1.73	.52	2.78	.176	5.82	.176	3.09	1.33	5.82		
38	-1.38	2.14	-.77	2.17	.577	7.45	.577	2.90	1.84	7.45		
39	-.08	2.06	1.07	1.49	-.421	6.01	-.421	2.42	1.32	6.01		
40	-.21	1.27	.48	1.16	-.433	3.56	-.433	1.67	.66	3.56		
41	.30	2.07	-.28	1.99	.117	5.58	.117	2.59	1.29	5.58		
42	.76	1.53	-.20	1.92	.101	4.04	.101	2.47	.72	4.04		
43	.77	.84	.14	.79	-.314	2.60	-.314	1.29	.53	2.60		
44	-1.47	3.12	1.43	1.88	.025	7.83	.025	3.76	1.81	7.83		
45	.92	1.18	.95	2.31	.026	5.64	.026	2.65	1.21	5.64		
46	1.09	1.71	-.58	1.73	-.457	4.85	-.457	2.52	1.03	4.85		
47	-.72	1.67	2.01	1.59	-.022	5.10	-.022	2.96	1.03	5.10		
48	-1.35	1.26	.90	1.74	-.524	5.79	-.524	2.34	1.32	5.79		
49	.09	1.69	-.21	1.32	-.320	3.67	-.320	2.01	.77	3.67		
50	.52	.99	-.05	.99	-.297	2.74	-.297	1.37	.60	2.74		

MEAN DU(M/S) = -.22
 MEAN DV(M/S) = .10
 SD DU(M/S) = 2.35
 SD DV(M/S) = 2.29
 R(DU,DV) = -.06
 MEAN W(M/S) = 2.82
 SD W(M/S) = 1.70
 SD MEAN(W(M/S)) = 1.00
 MEAN MAXW(M/S) = 5.90
 SD MAXW(M/S) = 1.99

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KSC WL GT 1500M SUMMER 3HR WIND CHANGE 3-9KM									
NP	U-COMPONENT CHANGE			V-COMPONENT CHANGE			VECTOR WIND CHANGE		
	MEAN	STD.DEV.	MEAN	STD.DEV.	STD.DEV.	R	MEAN	STD.DEV.	MAX
1	-1.65	1.38	2.21	1.66	1.28	.187	3.26	1.28	5.91
2	1.80	.80	.13	1.17	.69	.104	2.19	.69	4.92
3	2.37	2.63	.37	1.97	1.50	.142	3.78	1.50	6.91
4	-1.20	.61	1.93	2.16	1.12	.208	2.74	1.12	4.14
5	-1.02	1.76	-.56	1.24	1.37	.453	2.02	1.37	4.93
6	-1.46	1.21	.88	2.43	1.16	.752	2.99	1.16	5.60
7	-1.20	1.13	1.28	2.30	1.03	.187	2.92	1.03	4.89
8	-.11	2.99	.83	2.07	1.25	-.816	3.50	1.25	5.94
9	-.55	1.25	-1.19	1.58	1.56	.421	1.82	1.56	5.15
10	-.64	2.16	-.43	.95	1.36	-.010	2.07	1.36	6.18
11	1.13	1.24	1.96	1.00	1.07	.342	2.55	1.07	3.91
12	-.26	3.16	-.33	1.80	1.12	-.185	3.47	1.12	4.75
13	1.36	1.39	-1.14	1.28	.68	.006	2.50	.68	3.61
14	-1.86	.77	1.25	1.56	1.08	-.215	2.62	1.08	4.62
15	-.24	1.41	-.89	2.27	1.05	-.065	2.62	1.05	6.31
16	.63	1.77	.74	2.48	1.48	-.659	2.83	1.48	6.46
17	-.67	1.70	.11	1.45	1.13	.172	2.05	1.13	4.87
18	-1.29	3.78	-.60	2.52	1.95	.447	4.33	1.95	7.61
19	-.22	1.86	-.11	1.32	1.05	-.550	2.03	1.05	4.17
20	-1.64	2.06	-.16	1.26	1.42	-.741	2.56	1.42	5.29
21	-.39	1.27	-.59	1.24	1.10	.636	1.56	1.10	5.40
22	-.05	1.43	.14	2.09	.99	.547	2.33	.99	5.56
23	-.37	1.81	.60	1.26	.82	.354	2.16	.82	4.06
24	-.55	.58	-.51	1.10	.61	.739	1.32	.61	2.22
25	-.49	.79	1.28	1.52	.69	.509	2.08	.69	4.00
26	-1.17	1.89	-.74	1.77	1.05	.319	2.74	1.05	4.71
27	-.13	1.07	-.09	2.37	1.20	-.376	2.31	1.20	6.58
28	-.77	1.43	.37	2.18	.93	.244	2.57	.93	4.66
29	1.62	.89	.43	1.63	.88	.453	2.34	.88	4.34
30	3.68	2.13	-2.69	2.85	1.60	-.312	5.55	1.60	9.11
31	-1.95	2.28	-2.06	2.09	1.60	.405	3.87	1.60	7.40
32	-.73	1.94	.08	1.45	1.10	.657	2.27	1.10	4.96
33	1.21	1.75	-.73	1.41	1.21	-.890	2.36	1.21	4.65
34	-1.02	1.64	-1.70	1.73	1.61	.231	2.65	1.61	5.98
35	-1.38	1.27	-.21	1.43	.91	.240	2.18	.91	4.16
36	-4.62	3.06	-.90	4.96	3.43	-.531	6.65	3.43	12.21
37	-.59	1.53	.51	2.66	1.13	.203	2.96	1.13	5.18
38	-1.38	2.00	-.75	1.95	1.70	.630	2.71	1.70	6.57
39	-.08	1.83	1.12	1.41	1.22	-.463	2.26	1.22	5.06
40	-.21	1.15	-.48	.89	.58	-.571	1.43	.58	2.67
41	-.29	1.58	-.25	1.82	1.17	-.148	2.13	1.17	4.41
42	-.79	1.44	-.19	1.87	.65	.122	2.40	.65	3.66
43	.78	.66	.14	.72	.40	-.354	1.19	.40	2.64
44	-1.52	2.81	1.42	1.69	1.45	.078	3.59	1.45	6.14
45	.93	.93	.96	2.21	1.15	.102	2.49	1.15	4.87
46	1.07	1.57	-.57	1.58	.89	-.530	2.37	.89	4.35
47	-.72	1.53	2.01	1.43	1.03	-.031	2.82	1.03	5.05
48	-1.36	1.19	-.91	1.52	1.17	-.545	2.24	1.17	5.21
49	-.08	1.54	-.17	1.13	.54	-.393	1.84	.54	2.85
50	.50	.78	-.04	.92	.46	-.563	1.22	.46	2.34

MEAN DU(M/S) = -.21
 MEAN DV(M/S) = .10
 SD DU(M/S) = 2.19
 SD DV(M/S) = 2.13
 R(DU,DV) = -.05
 MEAN W(M/S) = 2.63
 SD W(M/S) = 1.57
 MEAN MAXW(M/S) = .98
 SD MAXW(M/S) = 5.14
 MEAN MAXW(M/S) = 1.69

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KSC WL GT 3000M SUMMER 3HR WIND CHANGE 3-9KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-1.57	.81	2.28	1.45	.471	3.11	.87	4.66
2	1.86	.65	.08	.69	-.521	2.02	.56	3.54
3	2.28	2.09	.30	1.49	.021	3.24	1.15	4.83
4	-.24	.53	1.94	1.88	.058	2.43	1.30	4.72
5	-.98	1.50	-.65	1.37	.655	1.93	1.33	4.58
6	-1.46	.94	.82	1.95	.771	2.65	.69	3.94
7	-1.21	1.18	1.29	1.96	.084	2.72	.96	4.01
8	-.21	2.72	.78	1.92	-.928	3.03	1.60	5.46
9	-.64	.89	-1.20	1.49	.828	1.61	1.51	5.20
10	-.71	2.17	-.35	.47	-.080	1.73	1.59	6.72
11	1.08	1.06	1.87	.86	.749	2.36	.98	3.55
12	-.31	3.01	-.32	1.28	-.139	3.11	1.07	4.42
13	1.43	.93	-1.16	1.15	.030	2.26	.69	3.71
14	-1.79	.56	1.24	1.02	-.073	2.33	.82	3.66
15	-.34	1.04	-.85	2.21	-.191	2.37	1.06	5.29
16	.59	1.63	.86	2.51	-.690	2.80	1.49	5.86
17	-.70	1.49	.03	1.06	-.062	1.73	.92	3.23
18	-1.39	3.35	-.62	2.26	.553	3.83	1.99	7.07
19	-.19	1.27	-.09	1.20	-.757	1.46	.99	3.58
20	-1.57	1.70	-.07	1.04	-.922	2.08	1.46	4.60
21	.31	.95	-.54	.88	.601	1.26	.69	3.20
22	.02	1.26	.17	1.67	.620	1.96	.75	4.19
23	-.40	1.54	.67	1.03	.799	1.87	.73	4.10
24	.51	.46	-.49	1.06	.881	1.23	.55	2.06
25	-.61	.83	1.24	1.50	.330	2.10	.68	3.67
26	-1.15	1.70	-.89	1.44	.425	2.56	.69	3.62
27	-.05	.72	-.19	1.95	-.467	1.85	.95	5.94
28	-.84	.93	.35	2.11	.516	2.33	.84	4.79
29	1.69	.84	.54	1.48	.561	2.26	.97	4.66
30	3.65	1.94	-.76	2.52	-.361	5.28	1.79	8.84
31	-1.94	2.07	-2.04	1.80	.589	3.40	1.97	6.38
32	-.66	1.64	.02	1.15	.710	1.93	.83	3.82
33	1.20	1.55	-.64	1.11	-.951	2.20	.80	3.36
34	-1.15	1.17	-1.83	1.41	.593	2.49	1.34	4.73
35	-1.37	1.01	.18	1.27	.379	2.04	.60	2.93
36	-4.64	2.82	-.97	4.28	-.608	6.31	2.97	11.05
37	.58	.92	.56	2.52	.186	2.61	.99	4.49
38	-1.33	1.95	-.71	1.78	.647	2.61	1.54	5.65
39	.03	1.27	1.17	1.16	-.416	1.81	1.02	3.50
40	-.22	1.01	.50	.61	-.760	1.13	.64	2.42
41	.30	.91	-.17	1.55	-.285	1.64	.80	3.32
42	.73	1.27	-.19	1.30	-.079	1.94	.31	2.82
43	.81	.56	.11	.45	-.415	1.00	.44	2.07
44	-1.39	2.82	1.39	1.06	-.106	3.24	1.55	5.91
45	.86	.52	.89	1.56	-.776	1.88	.85	4.27
46	1.00	1.16	-.56	1.37	-.824	1.95	.86	3.57
47	-.66	1.40	1.97	1.19	-.134	2.66	.79	4.12
48	-1.26	1.07	.86	1.35	-.567	1.94	1.24	4.70
49	.10	1.28	-.13	1.05	-.344	1.51	.69	3.26
50	.49	.67	-.08	.80	-.565	1.08	.41	1.75

MEAN DU(M/S) = -.22
 MEAN DV(M/S) = .09
 SD DU(M/S) = 2.00
 SD DV(M/S) = 1.90
 R(DU,DV) = -.07
 MEAN W(M/S) = 2.34
 SD W(M/S) = 1.49
 SD MEAN(W/S) = .95
 MEAN MAX(W/S) = 4.44
 SD MAX(W/S) = 1.64

KSC WL GT 6000M SUMMER 3HR WIND CHANGE 3-9KM

NP	U-COMPONENT CHANGE		MEAN	V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.		STD. DEV.	MEAN		STD. DEV.		
1	-1.55	.52	2.60	1.08	-4.11	3.09	1.05	6.16	
2	1.82	.34	.07	.41	-.778	1.87	.32	2.63	
3	2.28	1.50	.28	1.19	.215	2.73	1.21	4.30	
4	-46	.63	1.80	1.54	-.292	2.02	1.47	4.90	
5	-1.01	1.30	-.37	.42	.433	1.35	1.08	3.11	
6	-1.60	.98	.72	.88	-.832	2.15	.41	2.60	
7	-.87	.60	1.11	.84	-.466	1.56	.79	2.69	
8	-.51	1.61	1.19	.64	-.870	1.98	.87	3.50	
9	-.63	1.54	-1.10	1.12	-.836	1.59	1.64	6.22	
10	-.88	1.69	-.17	.18	-.534	1.51	1.18	3.92	
11	1.02	.78	2.31	.55	-.845	2.62	.69	3.33	
12	-.05	2.62	.13	.73	-.333	2.53	.99	4.49	
13	1.30	.75	-1.17	.58	.159	1.91	.53	2.66	
14	-1.64	.24	1.36	.95	.205	2.26	.61	3.43	
15	-.27	1.05	-.86	2.02	-.555	2.23	1.01	4.21	
16	.92	.58	.77	1.99	-.252	2.05	1.23	5.01	
17	-.96	.94	-.29	1.04	.719	1.54	.76	2.79	
18	-1.82	1.34	-1.07	1.12	.649	2.31	1.47	4.50	
19	.07	.84	-.37	.88	-.804	1.12	.60	2.20	
20	-1.69	1.64	-.14	.70	-.710	2.10	1.28	3.84	
21	.43	1.13	-.53	.46	-.867	1.30	.51	2.20	
22	-.23	.57	.10	.56	-.120	.77	.32	1.59	
23	-.32	1.26	.59	.80	-.952	1.50	.65	2.99	
24	.46	.17	-.80	.53	-.075	1.01	.37	1.54	
25	-.56	.27	1.29	1.30	.642	1.80	.72	2.89	
26	-1.38	1.51	-.94	1.19	-.801	2.25	1.18	3.87	
27	.11	.59	-.71	1.65	-.911	1.27	1.41	5.66	
28	-1.14	1.00	.13	1.81	-.890	2.20	.86	3.73	
29	1.58	.52	.59	1.61	.939	2.14	1.07	5.24	
30	3.81	1.62	-3.35	.92	.480	5.36	.75	7.23	
31	-2.14	1.48	-2.07	1.56	.939	3.03	2.08	6.49	
32	-.65	.75	.05	1.00	.818	1.28	.57	2.06	
33	1.36	1.28	-.77	.91	-.831	2.00	.94	3.12	
34	-1.00	1.17	-1.82	.96	.088	2.37	1.00	3.78	
35	-1.60	1.11	-.04	.94	.862	1.95	.93	3.36	
36	-4.87	2.08	-1.50	1.97	-.819	5.52	1.92	9.76	
37	.53	.49	.92	1.66	.829	1.91	.68	3.25	
38	-1.66	.86	-.73	1.61	.086	2.47	.73	3.81	
39	.10	1.05	1.18	1.10	-.690	1.76	.78	2.86	
40	-.32	.43	.36	.49	-.465	.72	.37	1.37	
41	.43	.66	-.60	1.52	-.107	1.63	.78	4.25	
42	1.08	.90	-.46	.68	.355	1.48	.68	2.44	
43	.91	.45	.04	.35	.024	.97	.46	2.01	
44	-1.70	1.31	1.65	.94	.412	2.71	.91	3.82	
45	.78	.28	-.91	1.44	-.515	1.60	1.02	4.06	
46	.96	.80	-.85	.87	-.918	1.43	1.00	2.62	
47	-.46	1.80	2.12	.86	.011	2.89	.56	3.64	
48	-.97	.70	.66	.97	-.721	1.50	.75	2.56	
49	-.09	.72	-.11	1.21	-.556	1.33	.48	2.58	
50	.31	.75	-.11	.72	-.757	1.04	.34	1.49	

MEAN DU(M/S)= -.25
 MEAN DV(M/S)= .05
 SD DU(M/S)= 1.76
 SD DV(M/S)= 1.60
 R(DU,DV)= -.03
 MEAN W(M/S)= 1.99
 SD W(M/S)= 1.32
 SD MEAN(M/S)= .91
 MEAN MAXW(M/S)= 3.66
 SD MAXW(M/S)= 1.59

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NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-1.73	.73	3.08	.80	-.907	3.55	1.03	5.39
2	1.90	.28	.01	.22	-.917	.22	.98	2.33
3	2.15	1.15	-.01	.75	.618	2.37	.94	3.41
4	-.63	.51	2.13	1.67	-.682	2.27	1.68	6.65
5	-1.19	1.13	-.32	.19	.466	1.36	.98	2.75
6	-1.32	.68	.82	.32	.365	1.65	.50	2.20
7	-.90	.75	1.19	.65	.509	1.71	.54	2.53
8	-.51	1.04	1.15	.32	-.535	1.58	.51	2.35
9	-1.07	2.03	-1.11	1.15	-.991	2.10	1.85	6.53
10	-.95	1.10	-.26	.30	.679	1.18	.94	2.68
11	1.07	.65	2.21	.82	-.191	2.61	.60	3.28
12	-.10	1.87	-.06	1.15	.641	2.03	.84	4.27
13	1.27	.33	-1.24	.26	-.690	1.79	.38	2.32
14	-1.68	1.33	1.44	.48	.009	2.25	.39	2.76
15	-.46	1.14	-.84	1.40	-.810	1.79	.99	3.88
16	-.82	.44	1.26	2.02	.355	2.11	1.43	4.97
17	-.87	.84	.37	1.03	.972	1.55	.49	2.49
18	-1.65	.38	-.98	.86	.529	2.04	.64	3.07
19	-.12	1.00	-.25	.49	-.556	1.04	.48	2.16
20	-1.89	1.11	-.25	.58	-.082	2.01	1.08	3.25
21	.35	.49	-.57	.29	.922	.86	.19	1.15
22	-.18	.58	.01	.44	.370	.69	.29	1.36
23	-.15	.83	.71	.64	.992	1.19	.46	2.11
24	-.44	.09	-.77	.44	.624	1.96	.25	1.29
25	-.63	.20	1.17	.75	.768	1.49	.38	2.01
26	-1.19	1.13	-.94	.76	.858	1.71	1.11	3.10
27	-.23	.40	-1.11	1.62	-.908	1.44	1.41	4.58
28	-1.11	.73	-.04	1.32	.892	1.83	.40	2.44
29	1.77	.81	.82	1.77	.997	2.39	1.37	5.73
30	3.90	.98	-3.73	.44	-.546	5.43	.88	7.07
31	-2.13	1.01	-2.10	1.03	.945	3.01	1.40	5.09
32	-.69	.45	.05	.93	.660	1.11	.57	1.87
33	1.39	.80	-.60	.64	-.381	1.67	.74	2.32
34	-.85	1.12	-1.99	.56	-.228	2.47	.40	3.06
35	-1.76	.92	-.09	.73	.719	1.99	.73	3.06
36	-5.25	.72	-1.43	.83	-.641	5.52	.65	6.85
37	.50	.40	.97	1.18	.773	1.27	.32	2.75
38	-1.58	.41	-.46	1.27	-.197	2.09	.32	2.69
39	.12	.42	1.34	.82	.718	1.49	.65	2.28
40	-.26	.26	-.48	.48	.644	.67	.38	1.95
41	.46	.48	-.19	2.20	-.152	2.08	1.00	5.25
42	1.04	.77	-.25	.73	.256	1.42	.49	2.16
43	.91	.32	.17	.85	.413	1.16	.58	2.90
44	-1.71	.58	1.45	.67	.350	2.34	.57	3.62
45	.73	.35	1.18	1.56	.991	1.82	1.09	4.29
46	.85	.56	-.80	.58	-.954	1.18	.78	2.15
47	-.20	1.52	1.95	.55	-.214	2.53	.20	2.88
48	-1.04	.55	.67	.44	-.460	1.30	.59	2.10
49	-.09	.51	-.07	1.20	-.692	1.17	.59	2.63
50	.19	.75	-.20	.35	-.303	.77	.40	1.46

MEAN DU(M/S) = -.25
 MEAN DV(M/S) = .08
 SD DU(M/S) = 1.63
 SD DV(M/S) = 1.54
 R(DU,DV) = -.02
 MEAN W(M/S) = 1.88
 SD W(M/S) = 1.24
 SD MEAN(W/S) = .95
 MEAN MAXW(M/S) = 3.23
 SD MAXW(M/S) = 1.51

KSC UNFILTERED SUMMER 3HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE			V-COMPONENT CHANGE			VECTOR WIND CHANGE			MAX
	MEAN	STD.DEV.		MEAN	STD.DEV.		MEAN	STD.DEV.		
1	-1.17	2.64		-1.36	5.14	R	-1.604	5.42	1.98	9.11
2	2.03	1.65		-1.36	2.41		-1.238	3.22	1.55	6.58
3		1.26		-1.61	2.35		-1.246	2.58	1.14	5.91
4	.72	3.20		7.29	5.01		-1.332	8.43	4.18	15.03
5	-1.48	2.09		-2.66	2.72		-1.311	3.44	1.60	7.27
6	-2.26	3.14		-2.66	2.52		-1.121	4.65	2.60	10.90
7	-2.87	2.95		-2.49	3.03		-1.466	4.98	2.74	10.83
8	-.04	3.10		-1.88	2.89		-1.019	4.04	2.27	8.76
9	-4.51	4.31		-4.29	3.41		-1.177	7.43	3.69	15.10
10	-2.31	3.38		-1.94	2.82		-1.448	4.76	1.68	10.17
11	-.96	2.80		-2.34	3.46		-1.691	4.61	2.21	8.00
12	-2.64	2.78		-4.22	4.07		-1.622	5.94	3.71	14.08
13	-1.37	2.11		1.82	3.29		-1.274	3.42	2.65	12.44
14	.48	1.35		-1.31	2.64		-1.200	3.02	1.26	5.44
15	2.49	2.43		-2.28	3.39		-1.338	5.11	1.62	9.40
16	-.04	2.92		2.12	3.87		-1.337	5.14	1.21	7.41
17	2.10	2.14		1.06	1.98		-1.345	3.39	1.59	8.07
18	-1.88	4.13		.91	2.07		-1.238	4.68	1.93	10.68
19	1.71	2.40		-.38	2.41		-1.030	3.60	1.28	7.21
20	2.27	3.34		-1.36	2.35		-1.080	4.17	2.49	10.33
21	.92	2.50		.14	2.29		-1.254	2.93	1.93	8.82
22	1.59	2.85		.16	2.28		-1.291	3.47	1.94	7.07
23	1.32	1.71		1.90	1.44		-1.187	2.88	1.43	7.06
24	.57	1.44		-.91	1.74		-1.646	2.22	1.15	5.51
25	.47	2.11		.87	1.81		-1.229	2.70	1.20	5.19
26	.19	2.28		-.05	1.87		-1.541	2.60	1.38	6.73
27	-.27	2.48		-2.47	3.67		-1.702	4.28	2.73	10.05
28	-.52	3.28		-.07	2.47		-1.635	3.59	2.05	10.90
29	3.00	2.51		3.87	2.56		-1.400	5.46	2.65	11.07
30	3.00	2.74		-2.85	5.16		-1.557	5.69	4.34	18.17
31	.15	3.69		-1.83	3.75		-1.286	4.33	3.50	12.68
32	.21	1.78		1.83	1.78		-1.246	2.81	1.36	7.08
33	.26	1.51		1.53	1.87		-1.289	2.70	.95	5.44
34	1.42	3.25		-1.75	2.62		-1.379	3.78	2.38	11.60
35	2.48	5.17		-.94	2.41		-1.725	5.34	3.31	13.71
36	-1.66	3.39		1.13	3.55		-1.409	4.78	2.28	9.50
37	2.46	2.44		1.36	2.29		-1.059	3.90	1.97	8.47
38	.13	1.66		-1.10	2.39		-1.569	2.63	1.24	5.77
39	2.00	2.53		.72	2.43		-1.055	3.33	2.38	10.15
40	.99	2.43		2.87	2.24		-1.351	3.89	2.23	8.13
41	-2.39	2.62		6.04	5.67		-.072	7.73	4.64	21.26
42	.72	2.49		2.02	2.64		-1.616	3.90	1.58	8.11
43	.48	2.37		3.57	3.05		-1.291	4.85	2.07	8.69
44	-2.58	3.37		.38	3.89		-1.495	5.10	2.69	10.43
45	.93	2.21		2.70	3.07		-.492	4.37	1.83	8.17
46	.29	3.04		1.47	3.92		-.410	3.97	3.32	12.83
47	.64	3.19		.82	2.32		-1.404	3.63	1.85	9.82
48	-.91	1.98		-.44	2.13		-1.617	2.75	1.36	5.81
49	.55	2.11		1.73	2.75		-1.479	3.50	1.75	10.26
50	.47	2.27		-.60	2.36		-.073	3.08	1.34	5.79

MEAN DU(M/S)= .23
 MEAN DV(M/S)= .25
 SD DU(M/S)= 3.19
 SD DV(M/S)= 3.77
 R(DU,DV)= .04
 MEAN W(M/S)= 4.16
 SD W(M/S)= 2.68
 MEAN MAXW(M/S)= 1.34
 SD MAXW(M/S)= 9.54
 SD MAXW(M/S)= 3.33

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NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-1.17	2.64	-1.13	5.14	-.606	5.42	1.98	8.93
2	2.03	1.64	-.37	2.38	-.240	3.20	1.54	6.55
3	.72	1.16	-.59	2.32	-.315	2.51	1.12	5.31
4	-.31	3.21	7.29	5.03	-.334	8.43	4.21	15.11
5	-1.48	2.04	-.72	2.74	-.304	3.45	1.56	6.90
6	-2.25	3.17	-2.66	2.49	-.125	4.65	2.60	11.00
7	-2.87	2.95	-2.50	2.98	-.482	2.74	2.74	10.85
8	-.04	3.08	-1.88	2.88	-.014	4.01	2.28	8.36
9	-4.51	4.31	-4.28	3.41	-.176	7.42	3.72	14.95
10	-2.32	3.37	-.94	2.83	-.445	4.78	1.66	9.33
11	-.95	2.80	-2.33	3.46	-.694	4.61	2.22	7.85
12	-2.64	2.74	-4.23	4.07	-.639	5.92	3.72	13.97
13	-.37	2.10	1.83	3.30	-.274	3.42	2.65	12.76
14	-.48	1.29	-1.32	2.61	-.203	2.99	1.20	5.40
15	2.50	2.45	-2.28	3.40	-.346	5.13	1.61	8.87
16	-.03	2.92	2.12	3.86	-.341	5.14	1.19	7.05
17	2.10	2.11	1.05	1.94	-.341	3.35	1.58	7.44
18	-1.88	4.14	-.91	2.42	-.242	4.69	1.92	10.68
19	1.71	2.40	-.38	2.40	-.022	3.61	1.23	6.82
20	2.27	3.37	-1.36	2.36	-.087	4.20	2.50	10.42
21	.92	2.47	.14	2.24	-.253	2.86	1.95	8.26
22	1.59	2.84	.16	2.26	-.292	3.45	1.94	7.12
23	1.33	1.68	1.89	1.37	-.234	2.83	1.40	6.38
24	.57	1.42	-.90	1.70	-.672	2.19	1.12	5.05
25	.47	2.10	.86	1.79	-.234	2.67	1.18	5.24
26	.18	2.26	-.05	1.88	-.546	2.59	1.41	6.59
27	-.27	2.48	-2.48	3.68	-.708	4.30	2.71	10.02
28	-.52	3.25	-.08	2.47	-.662	3.58	2.03	10.44
29	3.00	2.51	3.87	2.55	-.407	5.44	2.67	11.14
30	3.01	2.69	-2.86	5.17	-.568	5.65	4.38	17.93
31	.15	3.72	-1.83	3.76	-.251	4.35	3.52	12.28
32	.20	1.78	1.84	1.77	-.261	2.81	1.34	6.63
33	.26	1.46	1.52	1.83	-.283	2.65	.93	5.42
34	1.41	3.24	-.75	2.60	-.373	3.79	2.33	10.11
35	2.47	5.19	-.94	2.41	-.727	5.35	3.31	13.68
36	-1.66	3.39	1.14	3.57	-.418	4.81	2.26	9.08
37	2.46	2.42	1.37	2.27	-.076	3.85	2.02	8.34
38	.12	1.64	-.09	2.39	-.576	2.62	1.24	5.98
39	2.00	2.54	.72	2.43	-.049	3.32	2.42	10.00
40	.99	2.44	2.88	2.21	-.360	3.91	2.20	7.67
41	-2.39	2.62	6.04	5.72	-.068	7.74	4.67	21.25
42	.72	2.46	2.02	2.64	-.640	3.91	1.54	8.27
43	.47	2.38	3.57	3.05	-.284	4.87	2.05	8.48
44	-2.58	3.38	.39	3.89	-.495	5.09	2.70	10.20
45	-.94	2.19	2.70	3.07	-.513	4.37	1.81	7.96
46	.29	3.06	1.47	3.92	-.419	3.97	3.35	13.00
47	.65	3.20	.81	2.28	-.405	3.61	1.85	9.49
48	-.91	1.95	-.44	2.06	-.641	2.70	1.33	5.59
49	.54	2.04	1.74	2.72	-.469	3.47	1.68	9.67
50	.48	2.26	-.60	2.36	-.081	3.06	1.37	5.66

MEAN DU(M/S) = .23
 MEAN DV(M/S) = .25
 SD DU(M/S) = 3.19
 SD DV(M/S) = 3.77
 R(DU,DV) = .04
 MEAN W(M/S) = 4.15
 SD W(M/S) = 2.69
 SD MEAN(M/S) = 1.35
 MEAN MAXW(M/S) = 9.31
 SD MAXW(M/S) = 3.38

KSC, WL GT 1500M, SUMMER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-1.22	2.47	.07	4.92	-.646	5.19	1.82	8.13
2	2.03	1.30	-.37	2.19	-.369	3.02	1.25	5.36
3	.72	1.04	-.64	2.10	.478	2.36	.92	3.65
4	.32	2.79	7.26	4.85	.344	8.14	4.23	15.10
5	-1.52	1.68	-.68	2.55	-.247	3.27	1.18	4.87
6	-2.28	3.06	-2.63	2.19	-.124	4.66	2.13	10.13
7	-2.88	2.65	-2.51	2.37	.686	4.40	2.80	9.60
8	-.05	2.78	-1.86	2.57	-.005	3.80	1.81	7.46
9	-4.50	3.99	-4.30	3.01	-.247	7.17	3.49	13.79
10	-2.35	3.17	-.90	2.68	-.475	4.53	1.73	7.59
11	.98	2.56	-2.34	3.07	-.681	4.25	2.09	7.55
12	-2.63	2.39	-4.20	3.82	.790	5.53	3.78	13.93
13	-.38	1.75	1.75	2.90	.219	3.15	2.17	9.22
14	.52	1.06	-1.36	2.40	-.193	2.82	1.03	4.30
15	2.44	2.21	-2.29	3.14	-.354	4.90	1.37	8.02
16	.00	2.74	2.11	3.70	.387	4.95	1.01	7.07
17	2.06	1.84	1.05	1.68	-.297	3.06	1.47	6.24
18	-1.88	3.98	.87	1.75	.272	4.49	1.73	10.46
19	1.68	2.09	.37	2.24	.018	3.35	1.07	5.06
20	2.23	3.25	-1.34	2.20	-.043	4.00	2.48	10.59
21	.94	2.13	.12	1.63	.437	2.42	1.50	5.37
22	1.58	2.55	.13	1.65	-.303	2.89	1.83	6.52
23	1.33	1.38	1.91	1.04	.456	2.60	1.27	4.55
24	.58	1.32	-.89	1.48	-.781	2.04	.94	3.79
25	.52	1.88	.87	1.52	-.277	2.31	1.21	4.74
26	.20	2.06	-.08	1.61	-.557	2.31	1.23	5.20
27	-.28	2.24	-2.44	3.49	-.708	4.11	2.51	9.63
28	-.58	3.16	-.08	2.34	.741	3.43	2.00	10.39
29	2.96	2.38	3.91	2.28	.486	5.21	2.78	10.39
30	2.96	2.49	-2.93	4.66	-.622	5.12	4.36	15.20
31	.17	3.26	-1.82	3.45	-.272	3.92	3.25	11.64
32	.15	1.78	1.91	1.42	-.358	2.78	1.05	5.26
33	.26	1.19	1.47	1.62	-.338	2.33	.93	4.41
34	1.44	2.75	-.81	2.01	-.326	3.31	1.82	7.40
35	2.49	5.01	-.93	2.08	.807	5.08	3.25	12.81
36	-1.71	3.08	1.17	3.40	.530	4.63	1.95	8.18
37	2.48	1.95	1.39	1.98	.069	3.62	1.63	6.78
38	.14	1.46	-.11	2.21	-.678	2.37	1.19	5.28
39	1.90	2.24	.77	1.92	.114	2.97	2.02	8.86
40	1.01	2.18	2.81	2.01	.364	3.74	1.93	6.52
41	-2.40	2.22	6.02	5.36	.129	7.50	4.40	19.05
42	.71	2.26	2.04	2.32	-.701	3.67	1.27	6.09
43	.48	2.05	3.52	2.88	-.288	4.65	1.87	7.60
44	-2.52	3.24	.40	3.57	.515	4.72	2.72	8.97
45	-.89	1.95	2.72	2.70	-.590	4.09	1.60	7.01
46	.31	2.80	1.39	3.34	.379	3.62	2.80	10.74
47	.60	2.86	.80	1.84	.389	3.24	1.44	6.33
48	-.83	1.60	-.45	1.63	-.712	2.24	1.05	5.07
49	.51	1.71	1.72	2.38	-.472	3.23	1.15	6.46
50	.48	2.06	-.63	2.09	.067	2.74	1.31	5.52

MEAN DU(M/S) = .22
 MEAN DV(M/S) = .24
 SD DU(M/S) = 2.98
 SD DV(M/S) = 3.54
 R(DU, DV) = .06
 MEAN W(M/S) = 3.88
 SD W(M/S) = 2.54
 SD MEAN(M/S) = 1.34
 MEAN MAXW(M/S) = 8.08
 SD MAXW(M/S) = 3.35

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KSC, WL GT 3000M, SUMMER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD. DEV.	MEAN	STD. DEV.		MEAN	STD. DEV.	
1	-1.27	2.25	4.65	7.11	-7.11	4.82	1.85	7.58
2	1.93	.88	2.01	.634	-.634	2.79	.94	4.73
3	1.68	.77	1.79	.593	.593	2.03	.77	3.25
4	1.37	2.32	4.29	.324	.324	7.85	3.99	13.75
5	-1.46	1.57	1.95	-.398	-.398	2.85	.81	4.04
6	-2.41	2.15	1.96	.222	.222	4.29	1.54	7.39
7	-2.84	2.39	1.84	.598	.598	4.10	2.51	8.98
8	-1.11	2.22	1.98	-.234	-.234	3.33	1.08	5.41
9	-4.36	3.66	2.64	-.437	-.437	7.04	2.89	11.64
10	-2.26	2.30	1.99	-.597	-.597	3.69	1.20	6.85
11	-.94	2.39	2.77	-.713	-.713	3.92	1.95	7.28
12	-2.66	1.90	3.27	.833	.833	5.15	3.50	11.32
13	-.22	1.94	2.21	.191	.191	2.84	1.83	6.43
14	.47	.58	2.23	-.320	-.320	2.29	1.38	4.57
15	2.35	1.73	2.61	-.255	-.255	4.22	1.78	7.57
16	-.02	2.28	3.49	.477	.477	4.52	.92	5.87
17	1.98	1.46	1.47	-.284	-.284	2.79	1.25	4.36
18	-2.01	3.96	1.16	.632	.632	4.18	2.10	9.59
19	1.69	1.28	2.02	.313	.313	2.71	1.15	4.73
20	2.05	2.47	1.74	.266	.266	3.64	1.36	6.84
21	.98	1.70	1.01	.467	.467	1.99	.97	4.01
22	1.56	2.28	.76	-.342	-.342	2.33	1.67	5.64
23	1.33	1.19	.60	.861	.861	2.41	1.08	4.39
24	.50	1.19	1.27	-.883	-.883	1.83	.86	3.60
25	.57	1.31	1.05	.051	.051	1.73	.97	3.46
26	.20	1.74	1.10	-.628	-.628	1.79	1.03	4.84
27	-.26	1.90	3.16	-.667	-.667	3.75	2.17	8.38
28	-.65	2.98	1.93	.740	.740	3.11	1.82	8.45
29	2.96	1.94	2.01	.707	.707	4.98	2.55	8.79
30	2.98	2.29	3.55	-.729	-.729	4.87	3.35	11.70
31	.00	2.48	2.56	-.392	-.392	3.38	2.02	8.17
32	.14	1.49	.63	-.712	-.712	2.46	.54	3.41
33	.29	1.07	1.58	-.378	-.378	2.20	.80	3.62
34	1.53	1.96	1.30	-.324	-.324	2.55	1.37	5.63
35	2.48	4.59	1.84	.946	.946	4.68	3.09	11.32
36	-1.54	2.69	2.21	.333	.333	3.79	1.20	6.82
37	2.53	1.17	1.83	.253	.253	3.36	1.27	5.85
38	.08	1.19	1.86	-.891	-.891	1.88	1.16	3.88
39	1.79	1.34	1.46	.510	.510	2.53	1.19	5.47
40	.96	1.76	1.72	.365	.365	3.28	1.83	6.52
41	-2.39	1.52	4.35	.280	.280	6.82	3.95	15.11
42	.81	1.90	1.61	-.626	-.626	3.01	1.15	5.56
43	.48	1.02	2.30	-.652	-.652	3.91	1.90	6.63
44	-2.42	3.22	3.17	.629	.629	4.51	2.46	8.89
45	.89	1.35	2.22	-.728	-.728	3.69	1.35	5.54
46	.40	2.14	2.12	.352	.352	2.76	1.74	5.17
47	.47	2.37	1.54	.309	.309	2.78	1.04	4.57
48	-.90	1.18	1.30	-.778	-.778	1.88	.72	3.29
49	.54	1.24	2.11	-.549	-.549	2.89	.84	4.15
50	.46	1.83	1.77	.023	.023	2.45	.96	4.33

MEAN DU(M/S) = .21
 MEAN DV(M/S) = .24
 SD DU(M/S) = 2.64
 SD DV(M/S) = 3.17
 R(DU,DV) = .09
 MEAN W(M/S) = 3.45
 SD W(M/S) = 2.27
 SD MEAN(M/S) = 1.35
 MEAN MAXW(M/S) = 6.59
 SD MAXW(M/S) = 2.81

KSC, WL GT 6000M, SUMMER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		
	MEAN	STD.DEV.	STD.DEV.	STD.DEV.		MEAN	STD.DEV.	MAX
1	-1.44	2.00	3.59	-1.00	-.885	3.87	1.47	6.47
2	1.86	.46	1.00	-.22	-.106	2.14	.37	2.83
3	.57	.67	1.41	-.69	.889	1.68	.62	2.67
4	.65	1.36	3.17	7.92	-.230	8.08	3.13	11.96
5	-1.42	1.19	1.10	-.89	-.134	2.10	1.00	3.32
6	-2.64	1.93	1.11	-2.69	.702	3.96	1.86	7.40
7	-3.28	.89	1.91	-2.39	.749	4.31	1.53	6.91
8	.02	1.13	1.51	-2.14	-.099	2.57	1.24	3.97
9	-4.41	2.78	1.25	-4.73	-.067	6.87	1.97	9.57
10	-2.16	.85	1.08	-1.06	-.873	2.76	.31	3.62
11	1.16	2.03	2.69	-2.35	-.741	3.90	1.73	6.57
12	-3.09	1.36	2.96	-4.52	.917	5.75	2.76	9.53
13	.25	1.61	1.37	1.61	-.415	2.33	1.31	5.44
14	.50	.70	1.33	-1.52	-.344	1.98	.94	3.64
15	2.56	1.00	.83	-2.68	-.192	3.80	1.00	5.17
16	-.18	1.77	2.99	2.43	.505	3.94	1.56	6.14
17	2.16	1.38	1.11	.94	.265	2.74	1.09	4.00
18	-1.85	2.72	.51	1.14	.780	3.17	1.50	7.22
19	1.67	1.45	1.47	.50	.875	2.52	.97	3.90
20	2.07	2.13	1.54	-1.32	.332	3.53	.67	4.98
21	1.18	.80	.85	.10	.555	1.62	.39	2.28
22	1.80	1.54	.23	1.79	-.110	1.90	1.48	4.27
23	1.24	.54	.78	-.74	.545	2.22	.43	3.00
24	.26	.62	.60	.99	-.863	1.13	.58	2.01
25	.61	.76	.88	-.18	-.443	1.40	.56	2.22
26	.41	1.22	.39	-1.93	-.736	1.31	.86	4.22
27	-.36	1.48	2.39	.19	-.142	2.98	1.70	5.98
28	-.61	2.82	1.02	3.95	.254	2.58	1.65	7.18
29	3.28	1.55	1.83	-2.55	.899	5.17	2.30	8.09
30	2.75	1.33	2.32	-1.53	-.743	3.98	2.32	8.85
31	.08	1.11	1.43	-1.02	-.269	1.92	1.39	4.48
32	.18	.78	.28	2.02	-.240	2.18	.20	2.63
33	.27	.91	1.59	1.30	-.459	2.13	.76	2.95
34	1.42	1.05	.81	-.80	-.566	1.79	1.10	3.77
35	2.63	3.34	1.12	-.87	.970	3.94	2.14	8.03
36	-1.75	1.87	1.59	1.32	.057	3.00	1.35	4.32
37	2.40	.97	.98	1.04	-.133	2.80	.93	3.89
38	.26	.85	1.41	-.22	-.759	1.52	.72	2.82
39	1.79	1.12	.93	2.70	-.395	2.25	.88	4.10
40	1.27	.71	1.45	6.32	.047	3.18	1.13	4.93
41	-2.62	1.34	.335	1.96	.268	7.16	2.39	11.22
42	.69	.78	1.27	3.73	.335	2.38	.94	3.73
43	.13	.51	1.69	1.91	.154	3.79	1.64	5.83
44	-2.30	2.01	1.91	.14	.174	3.26	1.54	5.92
45	.76	.94	2.17	2.90	-.800	3.49	1.55	5.39
46	.62	.92	.91	1.45	-.559	1.79	.98	3.93
47	.36	1.68	1.17	.67	.035	2.04	.76	3.74
48	-1.05	.75	.53	-.23	-.643	1.26	.64	2.47
49	.57	.79	2.05	1.66	-.902	2.72	.69	3.80
50	.62	1.31	1.07	-.72	.411	1.90	.35	2.51

MEAN DU(M/S) = .22
 MEAN DV(M/S) = .25
 SD DU(M/S) = 2.23
 SD DV(M/S) = 2.85
 R(DU,DV) = .15
 MEAN W(M/S) = 3.02
 SD W(M/S) = 2.04
 SD MEAN(M/S) = 1.51
 MEAN MAXW(M/S) = 5.08
 SD MAXW(M/S) = 2.37

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KSC, WL GT 9000M, SUMMER 3 HR WIND CHANGE 9-16 KM

NP	U-COMPONENT CHANGE		V-COMPONENT CHANGE		R	VECTOR WIND CHANGE		MAX
	MEAN	STD.DEV.	MEAN	STD.DEV.		MEAN	STD.DEV.	
1	-1.39	1.56	-1.35	2.28	-.884	2.60	1.06	5.32
2	1.75	.67	-.20	.61	.658	1.93	.45	2.36
3	.80	.71	-.52	.80	.724	1.33	.54	2.31
4	.90	.94	7.43	2.72	-.519	7.62	2.50	10.58
5	-1.61	.63	-.81	.90	-.009	2.01	.63	2.76
6	-3.13	1.98	-2.63	.80	.668	4.20	1.91	7.32
7	-3.07	.93	-2.09	1.41	.978	3.83	1.40	5.90
8	.19	.89	-2.11	1.17	-.497	2.38	.98	3.38
9	-3.99	2.26	-5.00	.71	-.425	6.73	1.12	8.21
10	-2.10	.59	-1.18	.57	-.924	2.53	.28	2.98
11	1.07	1.80	-1.89	2.04	-.791	3.23	1.30	5.17
12	-3.23	.90	-3.89	2.95	.955	5.49	2.22	8.45
13	.74	1.59	1.15	1.16	-.729	2.09	1.16	5.46
14	.66	1.09	-1.73	.99	-.893	2.05	1.18	5.09
15	2.22	1.24	-2.94	.45	-.327	3.83	.81	4.94
16	-3.33	1.82	2.75	1.50	.377	3.32	1.47	5.71
17	1.96	1.21	.83	.94	.687	2.39	1.05	3.53
18	-2.09	2.14	1.13	.27	.061	2.73	1.70	5.91
19	1.35	1.77	1.18	1.18	.961	2.37	.89	3.44
20	2.05	1.56	1.45	1.45	.673	3.10	.38	3.63
21	1.28	.40	-1.01	.54	.159	1.41	.32	2.11
22	1.81	.65	-.01	.37	.529	1.85	.64	2.88
23	1.08	.38	1.81	.11	-.954	2.12	.26	2.51
24	.16	.36	1.23	.37	-.623	.85	.41	1.46
25	.71	.25	1.23	.40	-.009	1.45	.37	2.12
26	.53	.97	-.77	.37	.978	.97	1.19	4.12
27	-1.23	1.08	1.38	.99	-.561	2.41	1.32	4.59
28	-1.04	2.41	-1.57	1.97	-.775	2.13	1.76	6.24
29	3.06	1.65	4.04	.78	-.886	5.18	1.57	7.15
30	2.79	1.05	-2.58	1.39	-.701	3.88	1.54	7.18
31	.29	1.27	-1.28	.78	.070	1.82	.79	2.92
32	.30	.59	2.14	.31	.802	2.24	.35	2.74
33	.43	.48	.97	1.34	-.313	1.66	.61	2.39
34	1.29	.41	-.76	.46	-.894	1.52	.56	2.59
35	2.59	1.61	-.81	.43	-.823	2.91	1.28	5.03
36	-1.54	1.88	1.92	1.29	-.460	2.64	1.20	4.70
37	2.35	.70	1.09	.65	.229	2.65	.74	3.20
38	.41	1.07	-.18	.69	-.171	1.21	.59	2.79
39	1.76	.97	.82	.51	-.515	2.12	.68	3.26
40	1.22	.45	2.51	1.05	-.131	2.90	1.42	8.79
41	-2.54	1.01	6.07	1.67	.375	6.72	.93	3.17
42	.75	.64	1.73	1.03	.735	2.04	.88	4.91
43	.48	.53	3.63	.98	-.750	3.73	1.15	4.61
44	-2.04	1.75	.40	1.14	.887	2.71	1.31	4.66
45	.76	.52	2.88	1.47	-.678	3.09	1.31	3.59
46	.82	.66	1.50	.82	.777	1.74	1.00	2.28
47	.41	.78	.74	.48	-.032	1.13	.51	1.96
48	-.94	.77	-.10	.37	-.308	1.14	.58	3.47
49	.68	.94	1.39	1.95	-.970	2.59	.59	1.80
50	.60	.78	-.46	.98	.423	1.44	.21	

MEAN DU(M/S)= .24
 MEAN DV(M/S)= .25
 SD DU(M/S)= 2.04
 SD DV(M/S)= 2.54
 R(DU,DV)= .16
 MEAN W(M/S)= 2.72
 SD W(M/S)= 1.83
 SD MEAN(M/S)= 1.48
 MEAN MAXW(M/S)= 4.32
 SD MAXW(M/S)= 2.05

APPENDIX B

Bivariate Normal Statistics of the Wind Change Vector

Page numbers for the various data bases are given in the table below. The numbers within the table represent an abbreviation of the actual page number; for example, 'B-2' is entered as '2' in the table.

PAGE			
LOCATION	SEASON OR MONTH	DT (HOURS)	PAGE
VAFB	WINTER	3.5	2
SANTA MONICA	JANUARY	6	3
SANTA MONICA	WINTER	6	4
VAFB	WINTER	7	5
SANTA MONICA	JANUARY	12	6
SANTA MONICA	WINTER	12	7

VAFB, UNFILTERED	. WINTER 3HR WIND CHANGE				COR	NOBS
ALTITUDE	DUBAR	SIGDU	DVBAR	SIGDV		
.0	.00	.0000	.00	.0000	.000	50
.5	.21	2.5188	.68	5.1487	.194	50
1.0	-.33	3.3286	.18	3.6582	-.028	50
1.5	-.24	3.1854	.17	3.9424	-.220	50
2.0	.50	3.2081	.15	5.2748	-.125	50
2.5	-.47	3.5181	.86	4.6424	-.049	50
3.0	-.39	4.0707	.63	4.1994	.002	50
3.5	-.16	4.0938	.40	4.6611	.031	50
4.0	-.57	4.9930	.32	4.6232	-.168	50
4.5	-.56	4.5410	-.01	4.2721	-.063	50
5.0	-.66	4.1136	-.91	5.8142	.212	50
5.5	.17	4.1955	-1.14	6.2635	.240	50
6.0	.48	5.3042	-1.47	7.9870	.114	50
6.5	-.17	5.9753	-1.52	8.2979	.372	50
7.0	.35	8.0316	-1.33	9.0426	.564	50
7.5	.00	9.3187	-1.08	10.3884	.645	50
8.0	-.54	10.0152	-.34	11.1869	.797	50
8.5	-.05	9.3115	.45	11.4792	.795	50
9.0	-.21	9.4840	.07	11.6001	.714	50
9.5	-.42	8.6849	-.01	10.0036	.689	50
10.0	-.49	8.1819	-.66	10.0735	.632	50
10.5	-1.09	8.6132	.08	9.4433	.577	50
11.0	-.28	7.7378	-.12	8.9661	.607	50
11.5	-.77	7.3135	.17	7.4421	.589	50
12.0	.09	6.5988	.20	6.0789	.330	50
12.5	-.09	6.5833	-.50	5.2253	.222	50
13.0	-1.07	5.6246	-.13	5.2773	.192	50
13.5	-.85	4.3464	-.23	4.8164	.145	50
14.0	-.49	4.5411	.27	3.8995	.392	50
14.5	.42	5.3960	.71	3.9908	-.034	50
15.0	-.39	4.0918	.88	3.6898	.030	50
15.5	-.24	4.5890	-.18	3.6643	.302	50
16.0	-.30	4.8020	.29	4.0407	.274	50
16.5	.75	4.8200	-.36	2.7997	-.177	50
17.0	-.14	5.4614	.59	4.0873	.278	50
17.5	-.18	4.8068	.35	3.7533	.161	50
18.0	-.72	4.2174	-.66	4.4098	.232	50
18.5	-.68	3.4118	-.37	3.9228	.413	50
19.0	-.38	2.4054	-.12	3.4080	.461	50
19.5	-.19	1.2025	-.08	1.7188	.448	50
20.0	.00	.0000	.00	.0000	.000	50

SANTA MONICA 6HR CHANGE JANUARY

ALTITUDE	DUBAR	SIGDU	DVRAR	SIGDV	COR	NBS
.0	.04	3.3325	.18	2.9512	.605	220
1.0	-.03	3.7055	-.08	3.6397	-.096	220
2.0	.07	3.8889	-.43	4.4095	.155	220
3.0	.26	4.3396	-.24	4.5760	-.008	220
4.0	.28	4.6986	-.28	4.9821	.099	220
5.0	.23	4.7401	-.47	6.3048	.084	220
6.0	.10	5.9622	-.65	7.6042	.106	220
7.0	.00	6.6473	-.64	8.9486	.106	220
8.0	-.17	7.5050	-.40	9.5154	.170	220
9.0	.12	8.0001	-.31	10.6471	.171	220
10.0	.30	8.4655	.10	9.7874	.176	220
11.0	.29	8.1432	-.39	9.5364	.159	220
12.0	.45	6.4402	.18	8.5698	.168	220
13.0	.78	5.7257	-.05	6.5048	-.024	220
14.0	.64	5.7182	.31	5.2001	.077	220
15.0	.31	4.8892	.36	4.8501	-.090	220
16.0	.08	4.7762	.50	4.0625	-.053	220
17.0	.21	3.9784	.07	3.5075	-.095	220
18.0	.27	3.7990	-.04	3.1618	-.043	220
19.0	.27	3.9956	-.11	3.5973	.076	220
20.0	.15	3.3189	.26	2.5730	-.179	220
21.0	.23	3.2683	.27	2.5716	-.008	220
22.0	-.09	3.0708	.27	2.9173	-.174	220
23.0	.06	3.2510	.41	2.6765	.151	220
24.0	.32	3.3276	.16	2.7273	.102	220
25.0	.37	3.6259	-.03	2.7966	-.087	220
26.0	.27	3.8033	.07	3.1671	-.064	220
27.0	.07	3.5599	.06	3.1488	-.060	220

SANTA MONICA 6HR CHANGE WINTER

ALTITUDE	DUBAR	SIGDU	DVBAR	SIGDV	COR	NOBS
.0	-.04	3.5498	-.04	3.1021	.542	880
1.0	-.08	3.3855	-.14	3.4870	-.095	880
2.0	-.02	3.8551	-.16	4.1184	.098	880
3.0	-.18	4.4591	-.10	4.6737	.113	880
4.0	-.05	4.6856	-.06	5.0709	.089	880
5.0	-.08	4.7346	-.01	5.7348	.091	880
6.0	-.16	5.6755	-.09	6.6426	.085	880
7.0	-.19	6.3793	-.03	7.5830	.089	880
8.0	-.26	7.1342	-.08	8.3179	.101	880
9.0	.03	7.7756	-.07	9.0437	.183	880
10.0	.19	8.0485	-.04	8.9338	.174	880
11.0	.12	7.7488	-.42	8.5891	.138	880
12.0	.08	6.7069	-.19	7.6835	.137	880
13.0	.28	5.6514	-.31	6.0003	.067	880
14.0	.15	5.3257	-.21	4.8948	.068	880
15.0	.03	4.5739	-.07	4.2863	.035	880
16.0	.03	4.4014	.08	3.8766	.001	880
17.0	.07	4.1151	-.12	3.3987	.018	880
18.0	.11	3.8502	.03	3.0306	-.006	880
19.0	.11	3.7653	-.12	3.2679	-.006	880
20.0	.07	3.5039	.06	2.8975	-.081	880
21.0	.11	3.3940	.01	2.8256	-.050	880
22.0	-.01	3.3593	.04	2.8635	-.054	880
23.0	.00	3.3393	.07	2.5389	-.014	880
24.0	.06	3.4103	-.01	2.7052	-.028	880
25.0	.20	3.4357	-.06	2.6926	-.067	880
26.0	.21	3.5390	-.10	2.8762	-.017	880
27.0	.09	3.5681	-.04	3.0124	.004	880

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VAFB 7HR CHANGE WINTER 57 PAIRS

ALTITUDE	DUBAR	SIGDU	DVBAR	SIGDV	COR	NOBS
.0	.00	.0000	.00	.0000	.000	57
.5	1.84	4.1751	-.35	3.9155	.375	57
1.0	1.11	4.5246	-.27	5.3412	.157	57
1.5	1.42	4.8081	.16	3.8592	.059	57
2.0	1.55	5.0863	-.64	4.2068	.208	57
2.5	1.34	5.0549	-.70	4.3824	.210	57
3.0	.47	4.2842	-.05	4.6965	.232	57
3.5	.97	4.2517	-.78	4.3354	.224	57
4.0	.14	4.8212	-.77	5.8417	.014	57
4.5	.71	4.9659	-.83	4.9838	-.098	57
5.0	.51	4.3480	-.78	5.6057	.105	57
5.5	1.08	4.4259	-.42	5.4708	.062	57
6.0	1.07	6.3593	-.48	5.9741	.231	57
6.5	.74	6.9314	-.71	6.2054	.389	57
7.0	-.93	7.2830	-1.22	8.2449	.658	57
7.5	-1.10	9.4781	-1.87	9.7394	.650	57
8.0	-1.00	11.0647	-1.93	10.5500	.664	57
8.5	-1.33	10.5040	-1.75	11.2246	.644	57
9.0	-.65	10.6092	-2.27	10.7298	.642	57
9.5	-.66	9.4879	-1.83	10.3270	.458	57
10.0	.28	9.7533	-.53	9.5086	.453	57
10.5	.31	8.1605	.88	8.6208	.524	57
11.0	.35	7.4219	1.40	8.4439	.474	57
11.5	-.35	6.8329	1.06	7.9905	.334	57
12.0	.25	7.2663	1.74	7.8281	.613	57
12.5	.04	6.8022	1.52	6.2130	.471	57
13.0	1.28	5.9575	.25	6.0837	.086	57
13.5	1.93	4.3728	.80	6.4358	.122	57
14.0	.07	3.0527	2.35	6.1092	-.076	57
14.5	1.38	4.4395	.85	5.6718	.179	57
15.0	.67	5.0685	1.17	6.5395	.324	57
15.5	1.41	4.6178	-.32	6.2420	.238	57
16.0	-.84	4.5128	-.09	4.8927	.248	57
16.5	-.08	4.5575	-.45	4.0259	.259	57
17.0	1.21	3.6311	.43	5.0116	.153	57
17.5	1.20	5.2375	-.67	4.7090	-.066	57
18.0	1.46	4.3162	-.04	4.1826	-.003	57
18.5	.82	3.1346	-1.32	3.7983	-.028	57
19.0	.41	2.3469	-.51	2.7676	.137	57
19.5	.21	1.1779	-.28	1.4201	.129	57
20.0	.00	.0000	.00	.0000	.000	57

SANTA MONICA 12HR CHANGE JANUARY

ALTITUDE	DUBAR	SIGDU	DVBAR	SIGDV	COR	NOBS
.0	-.09	4.4196	.17	3.8752	.665	186
1.0	-.04	4.5828	-.01	3.9879	-.067	186
2.0	.31	5.2070	-.30	5.0866	.143	186
3.0	.87	5.4350	-.36	6.3846	.119	186
4.0	.28	6.6506	.18	7.6944	.171	186
5.0	.53	6.9749	-.23	9.9222	.227	186
6.0	.89	7.7210	-.21	11.0484	.071	186
7.0	.63	8.9684	-.47	12.8649	.157	186
8.0	.59	9.8431	-.34	14.6020	.293	186
9.0	.98	11.0545	-.03	16.0470	.267	186
10.0	.97	10.2734	.27	15.7069	.276	186
11.0	1.20	9.8882	.60	13.8175	.276	186
12.0	.81	9.1094	.41	11.6710	.284	186
13.0	.52	8.7099	.22	9.5227	.236	186
14.0	-.16	7.0920	.27	8.0716	.172	186
15.0	-.18	6.1227	-.06	6.4785	.114	186
16.0	.06	4.9796	-.09	5.6708	.204	186
17.0	.21	5.3699	-.23	4.7881	.159	186
18.0	-.10	4.9848	-.06	4.2541	.157	186
19.0	.09	4.5611	.03	3.8798	.144	186
20.0	.31	4.4419	-.09	3.5066	.098	186
21.0	.21	4.2740	.09	3.0819	.036	186
22.0	.27	4.3328	-.08	3.1518	-.045	186
23.0	.16	4.2902	-.07	3.0945	-.013	186
24.0	.21	4.2590	-.16	3.2197	-.070	186
25.0	.10	4.5292	-.35	3.8534	.042	186
26.0	.07	5.1335	-.33	3.6308	.100	186
27.0	-.08	5.6178	-.37	4.2613	.108	186

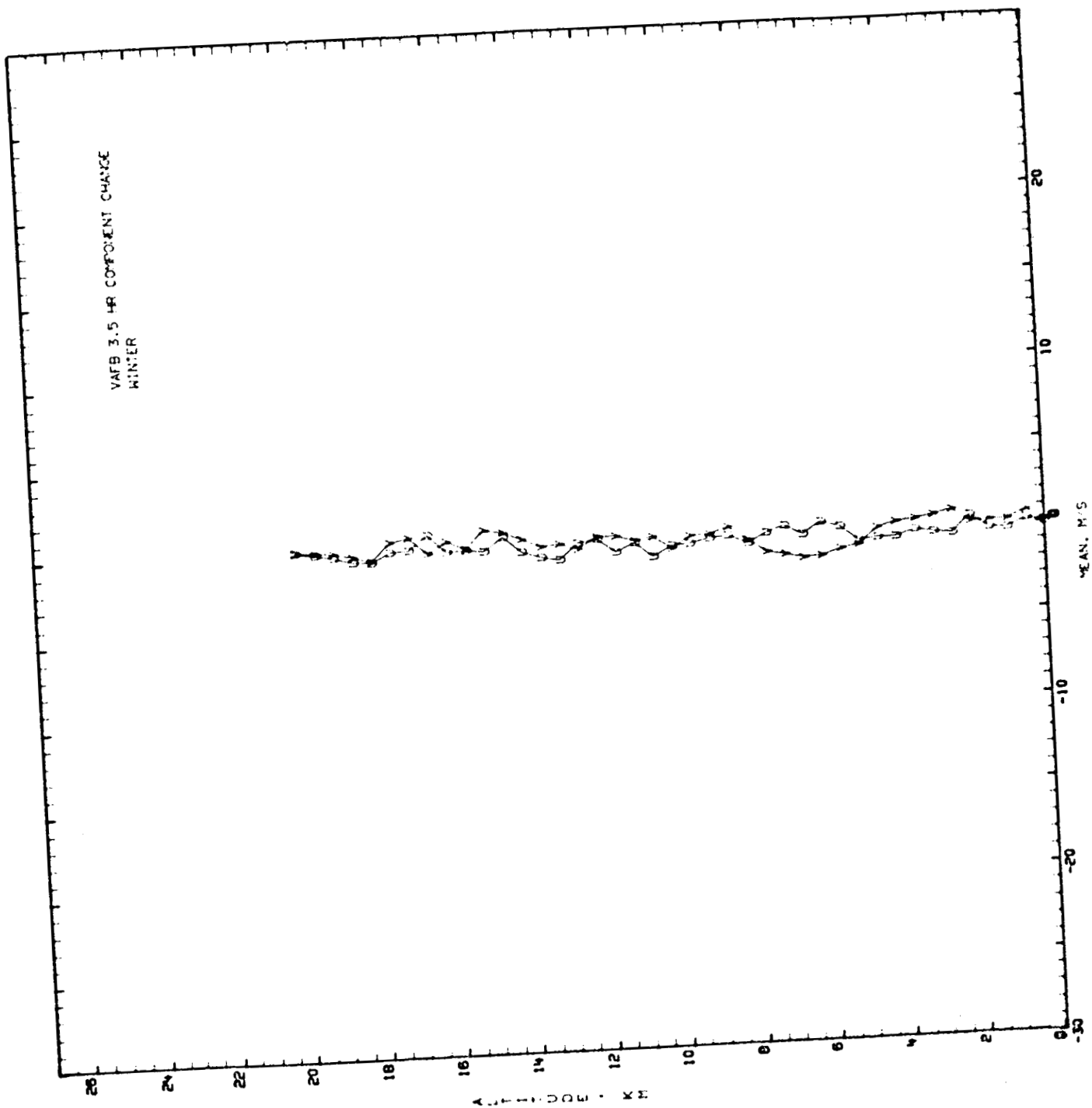
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SANTA MONICA 12HR CHANGE WINTER

ALTITUDE	DUBAR	SIGDU	DVBAR	SIGDV	COR	NOBS
.0	.05	4.9382	.01	3.9539	.692	724
1.0	.14	4.0655	-.14	4.0926	-.044	724
2.0	.18	4.9900	-.07	5.0476	.075	724
3.0	.41	5.8851	-.05	6.0703	.086	724
4.0	.29	6.6186	.03	6.8830	.169	724
5.0	.29	6.9833	-.08	8.2079	.180	724
6.0	.49	8.0833	.05	9.3900	.074	724
7.0	.37	9.1153	-.11	10.5766	.127	724
8.0	.54	10.2657	-.06	12.2663	.202	724
9.0	.52	10.7738	-.12	13.4918	.222	724
10.0	.20	11.0020	-.25	13.7514	.247	724
11.0	.57	10.5929	-.34	12.6643	.239	724
12.0	.32	9.4120	-.10	10.6896	.210	724
13.0	.20	8.4050	-.05	8.9862	.157	724
14.0	-.05	7.1578	.16	7.4875	.138	724
15.0	.04	5.7628	-.12	6.2346	.125	724
16.0	.11	4.9956	-.11	5.3410	.139	724
17.0	.20	5.2176	-.18	4.4983	.036	724
18.0	.02	4.8234	-.13	4.1302	-.069	724
19.0	.12	4.5670	.02	3.6909	-.042	724
20.0	.32	4.1605	-.15	3.3192	-.004	724
21.0	.18	3.8943	.04	3.2335	-.087	724
22.0	.19	4.0329	-.01	3.2645	-.037	724
23.0	.14	3.9962	.03	3.2273	-.028	724
24.0	.18	4.1539	.02	3.1656	.059	724
25.0	.08	4.2449	-.06	3.3886	.058	724
26.0	.01	4.6451	-.01	3.4089	.079	724
27.0	.09	5.1076	-.04	3.8489	.110	724

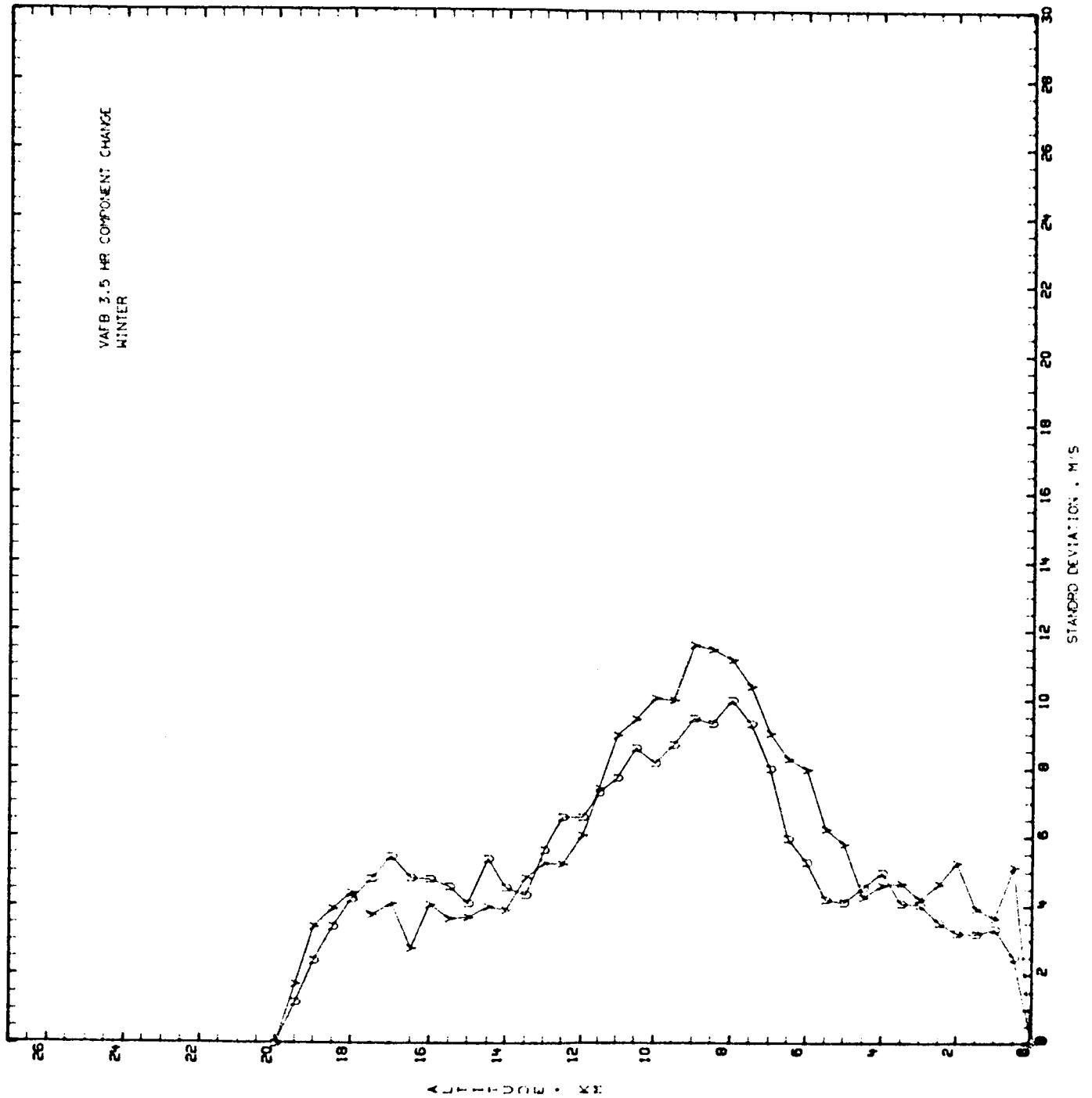
APPENDIX C

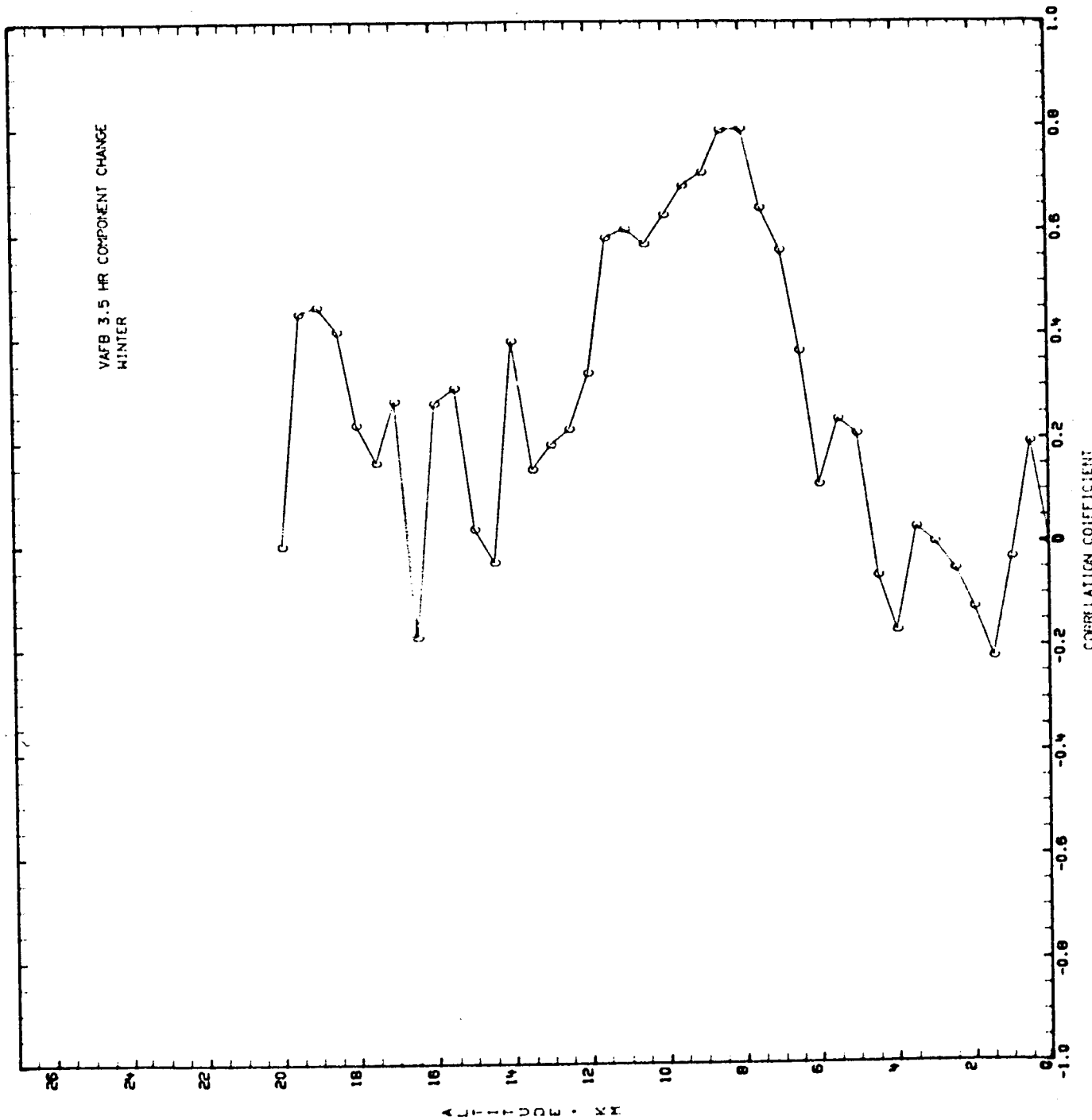
Plots of Bivariate Normal Statistics Listed in Appendix B



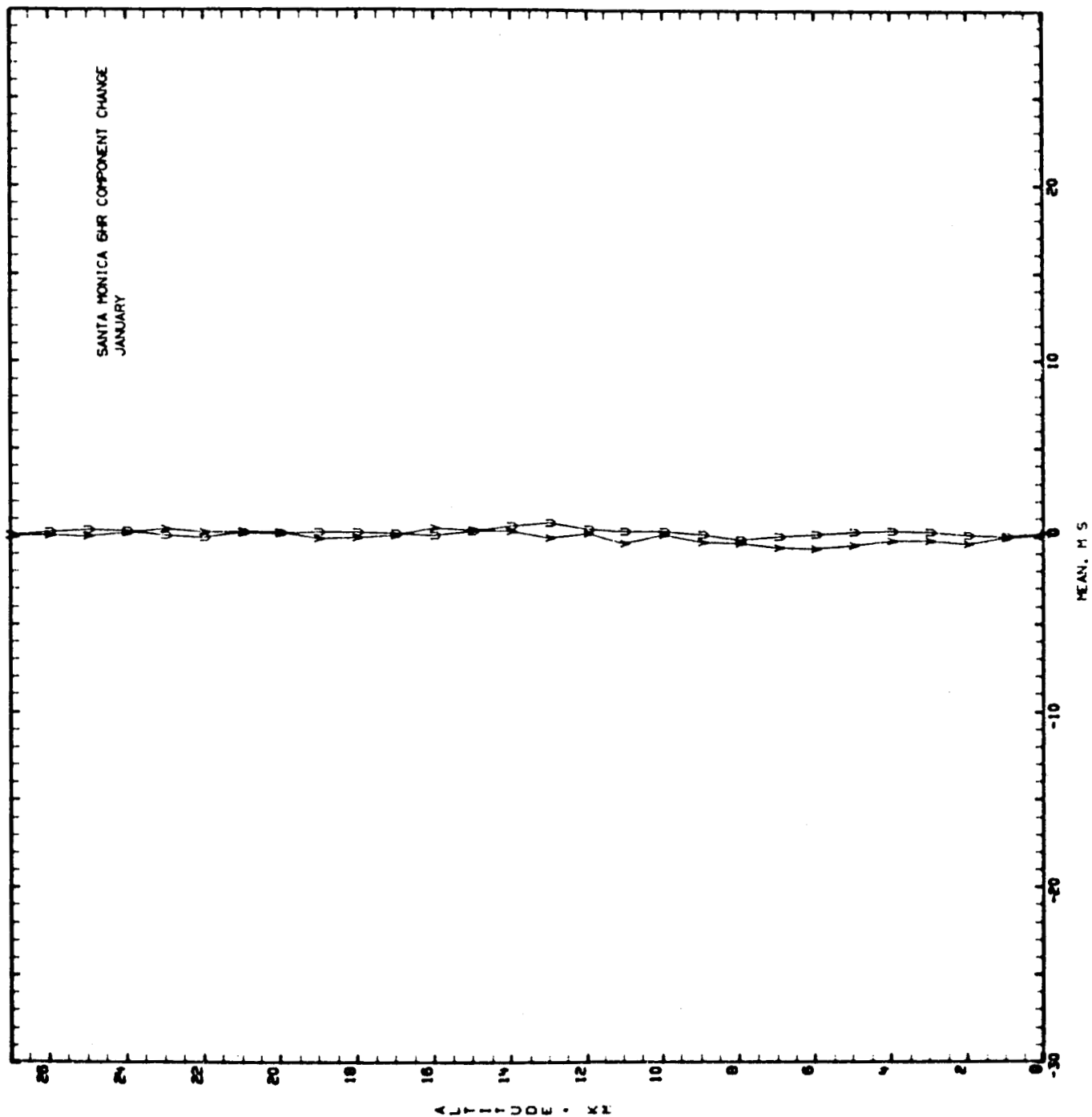
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VAFB 3.5 HR COMPONENT CHANGE
WINTER

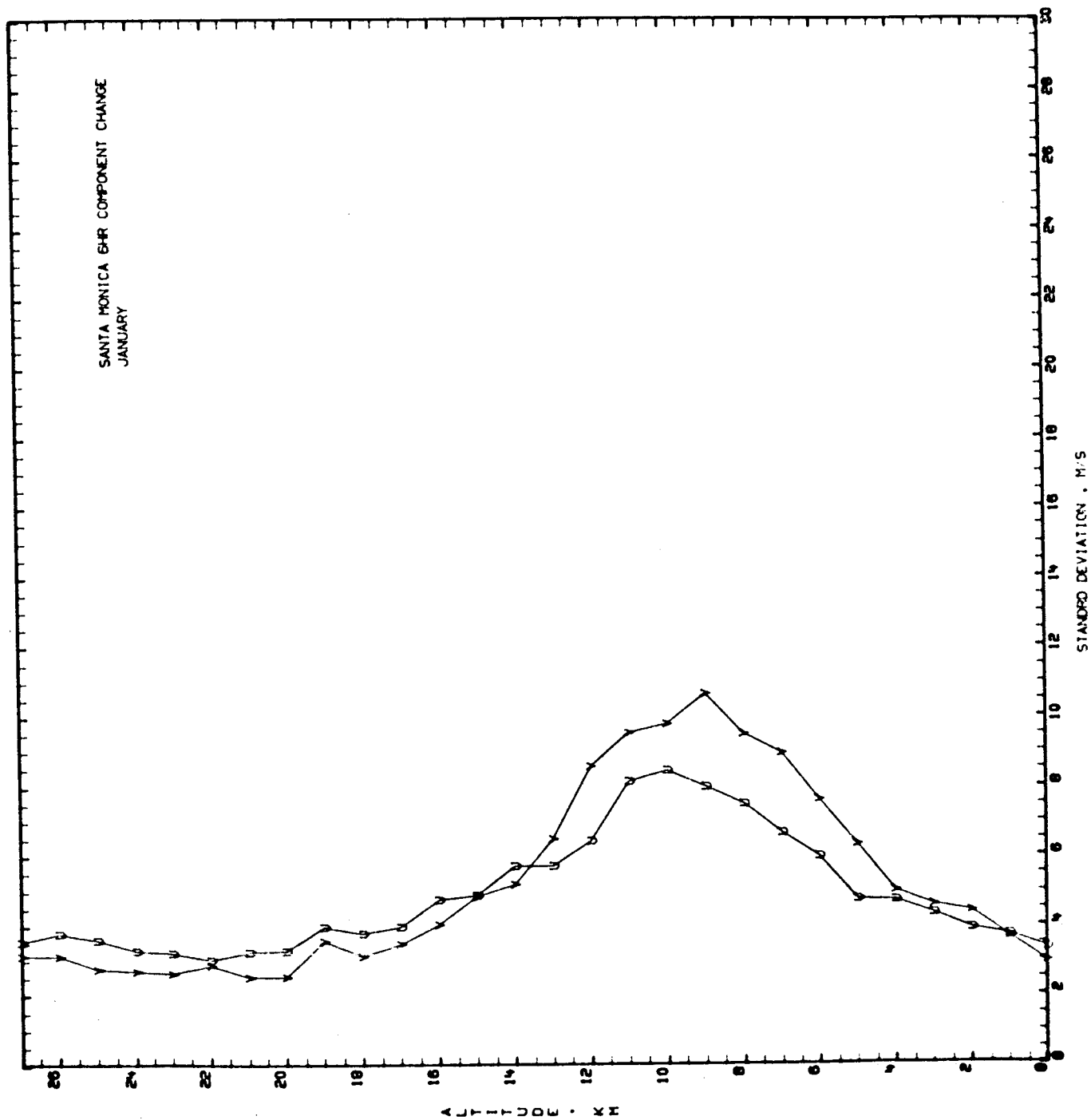


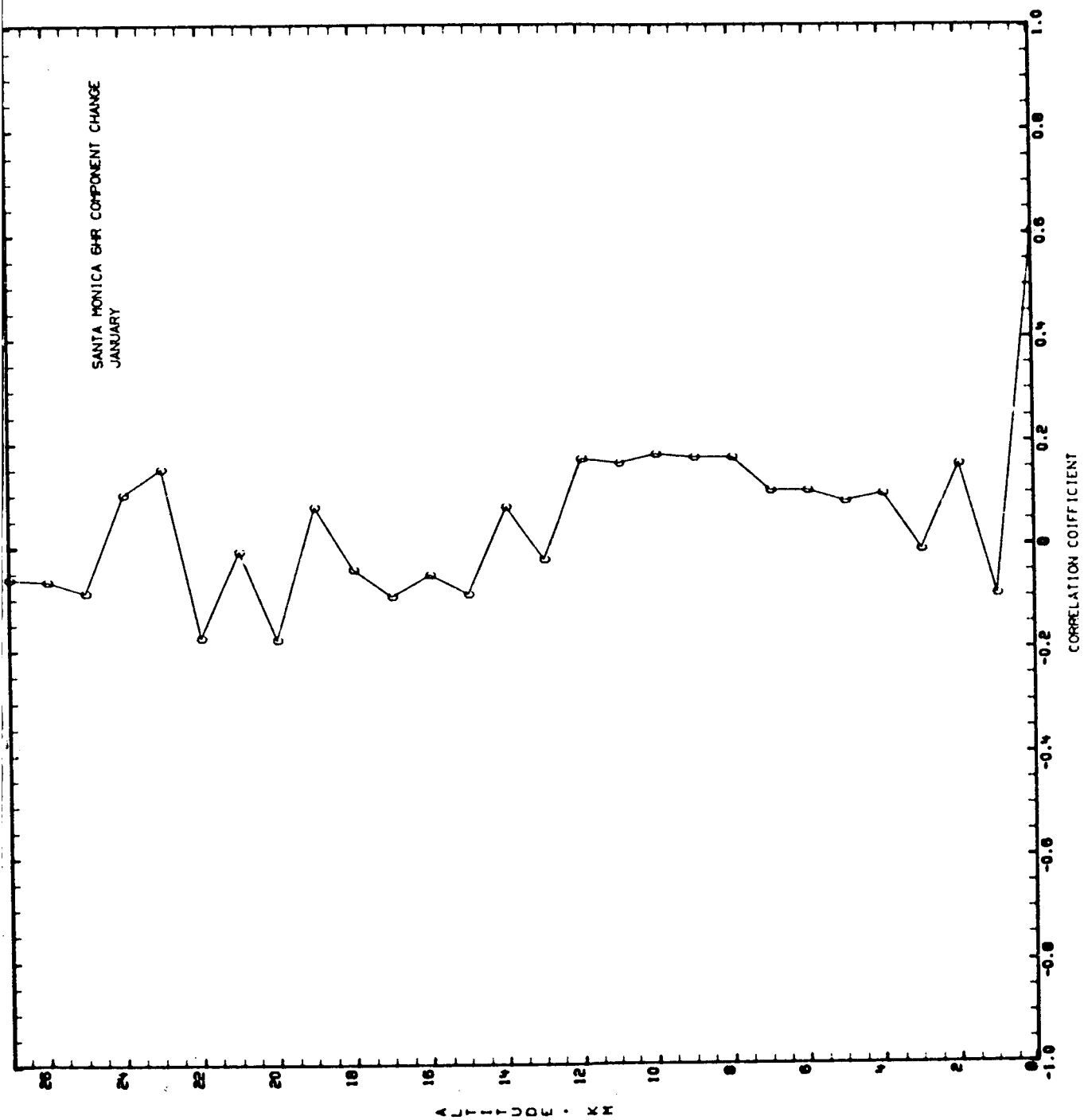


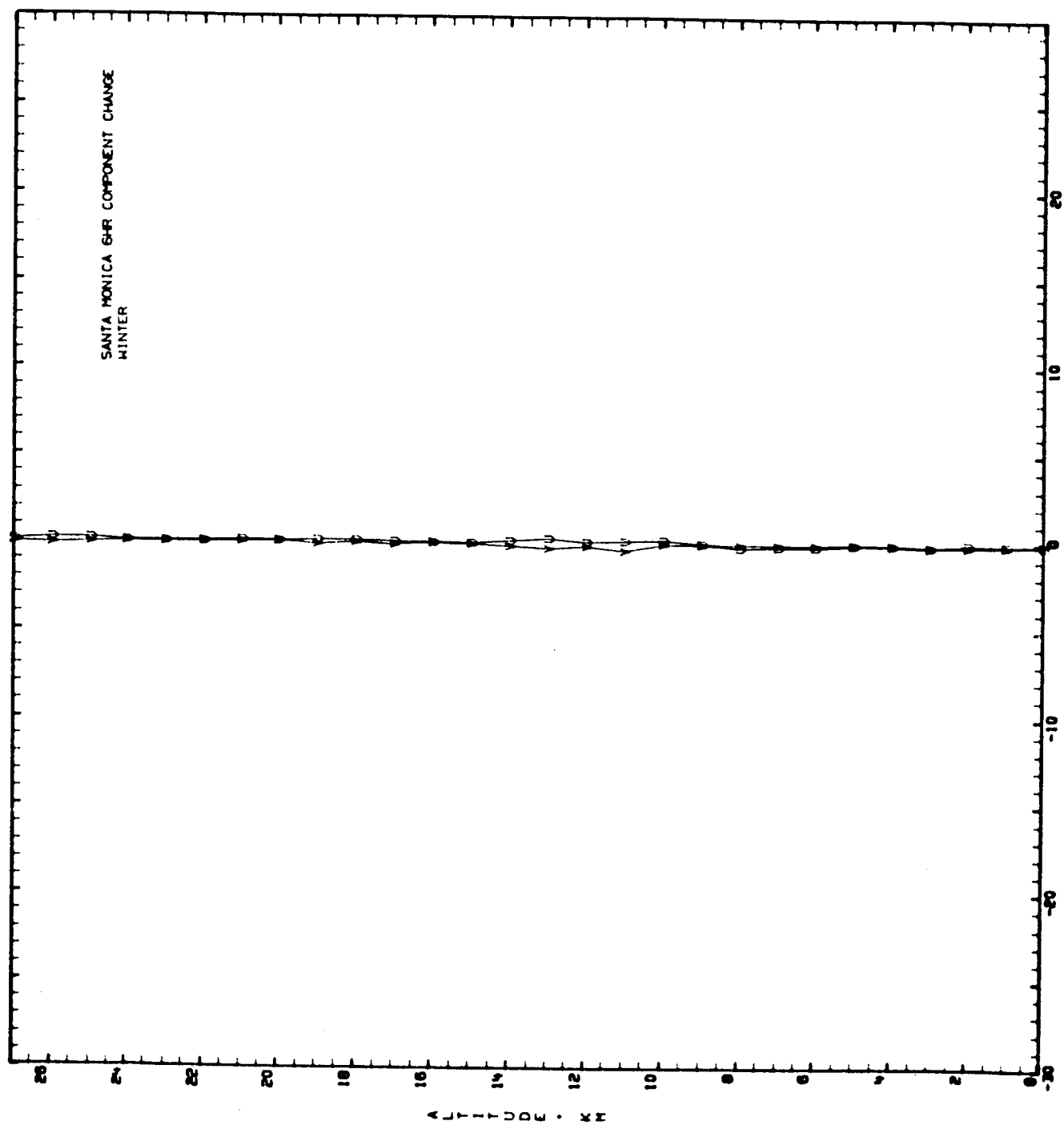
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C-3



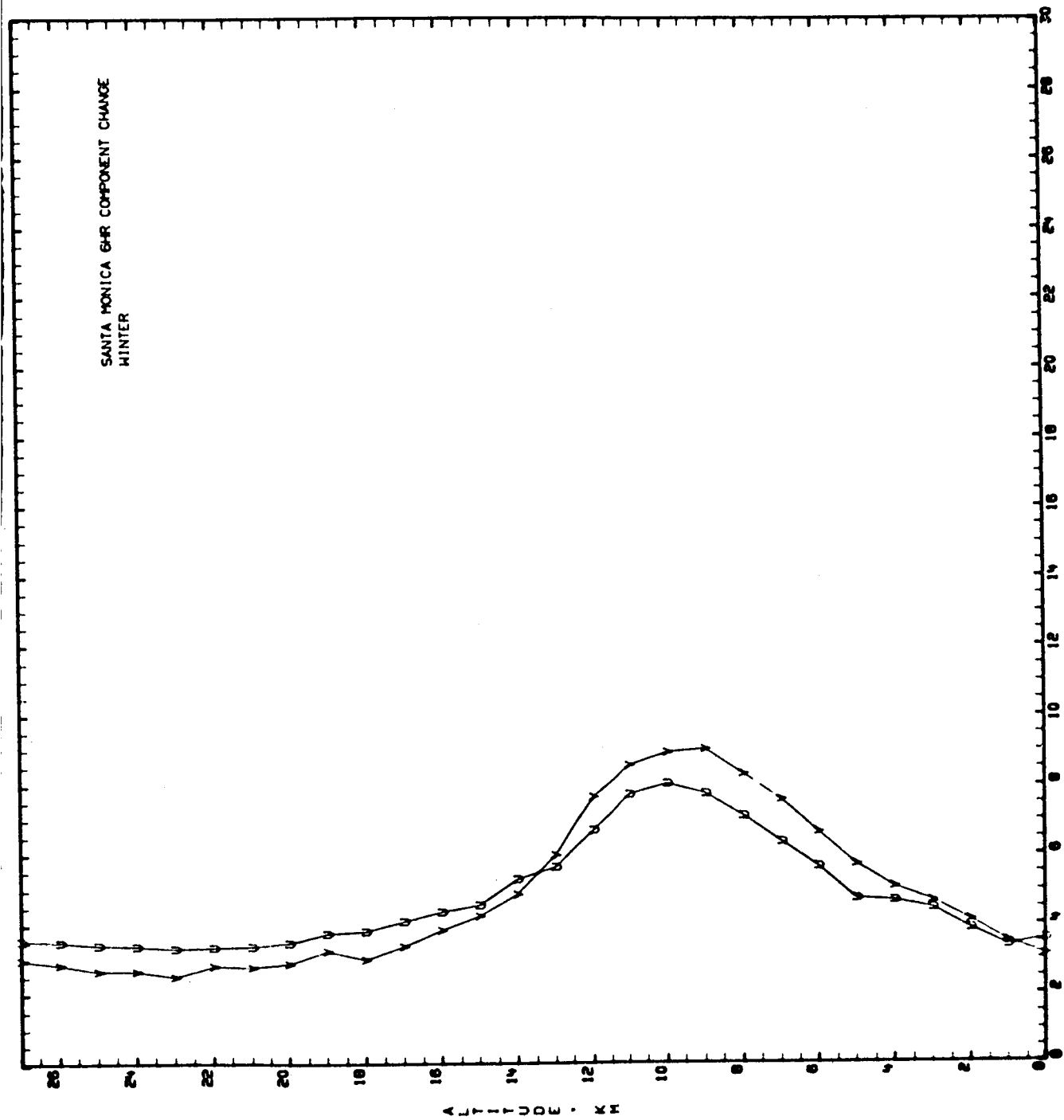


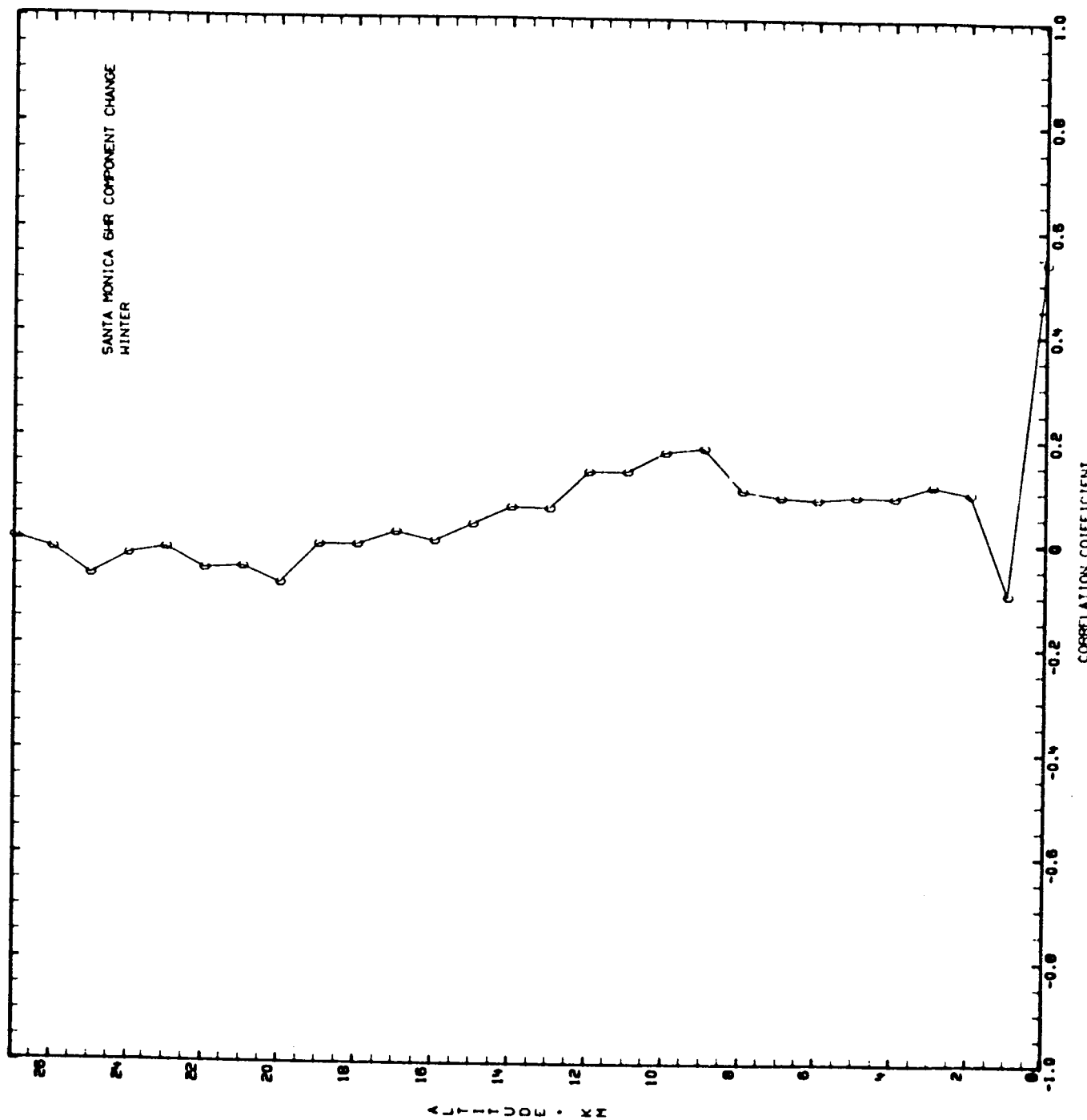


SANTA MONICA SHR COMPONENT CHANGE
WINTER

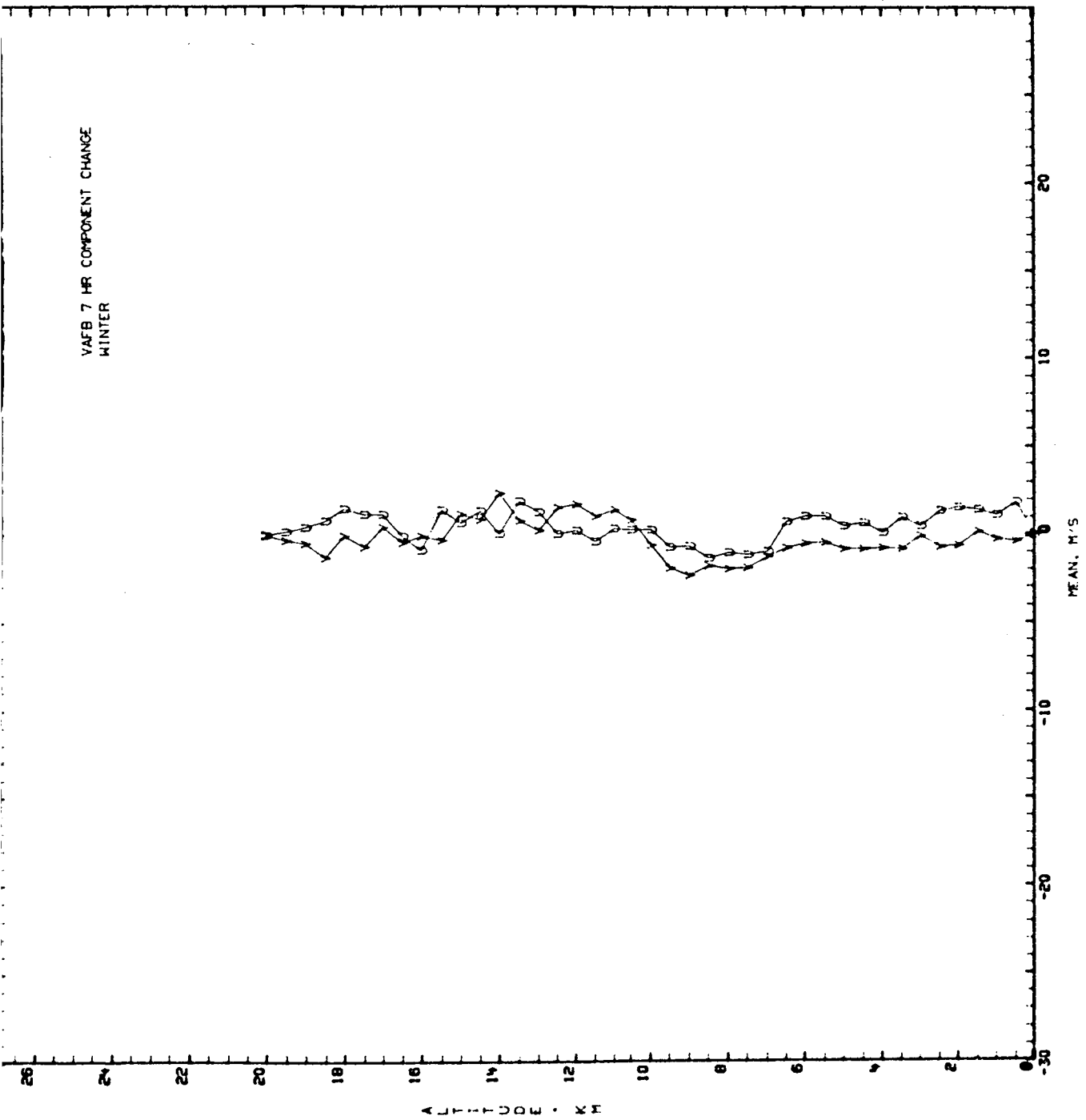
ALTITUDE - KM

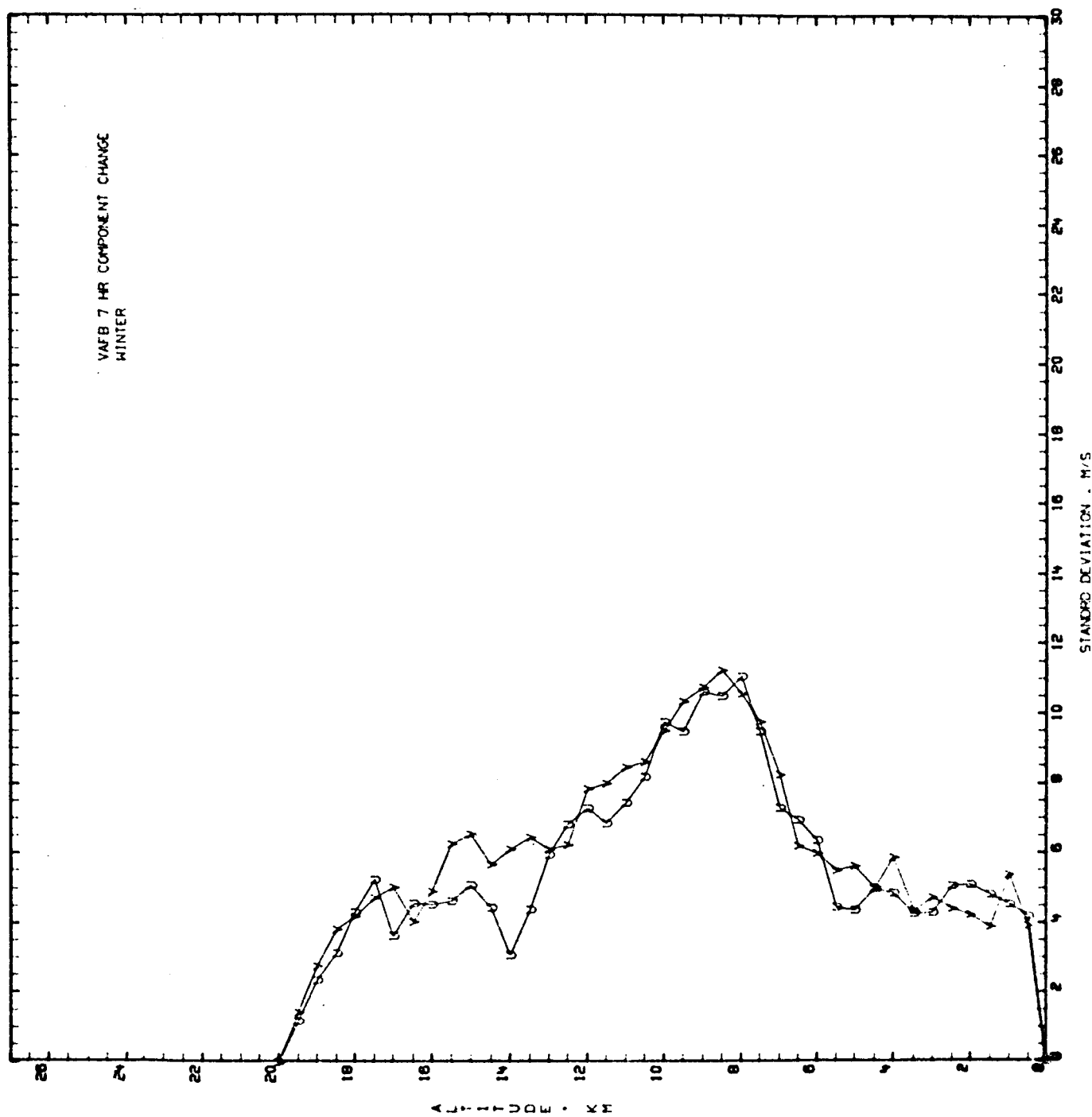
STANDARD DEVIATION - M/S



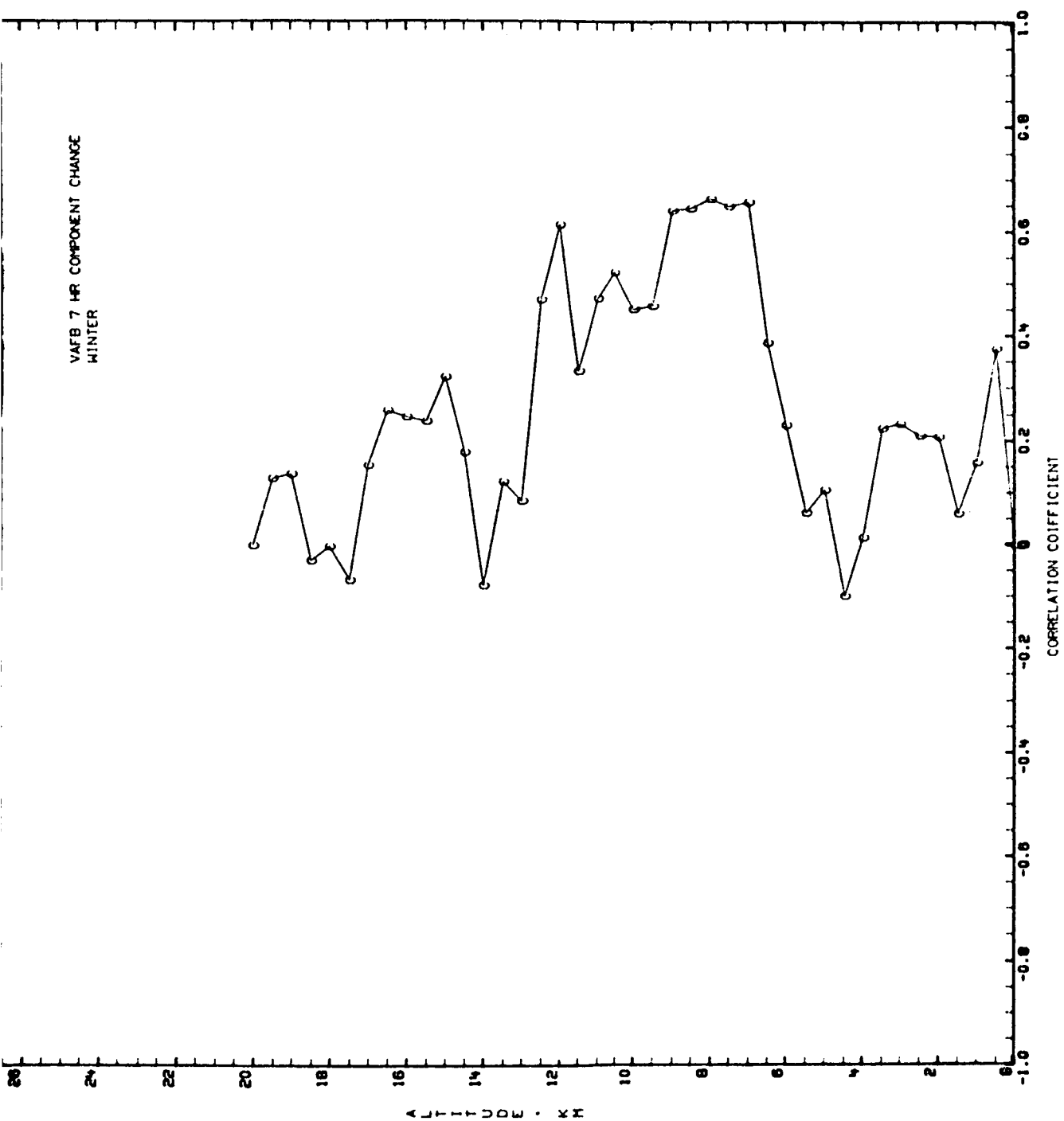


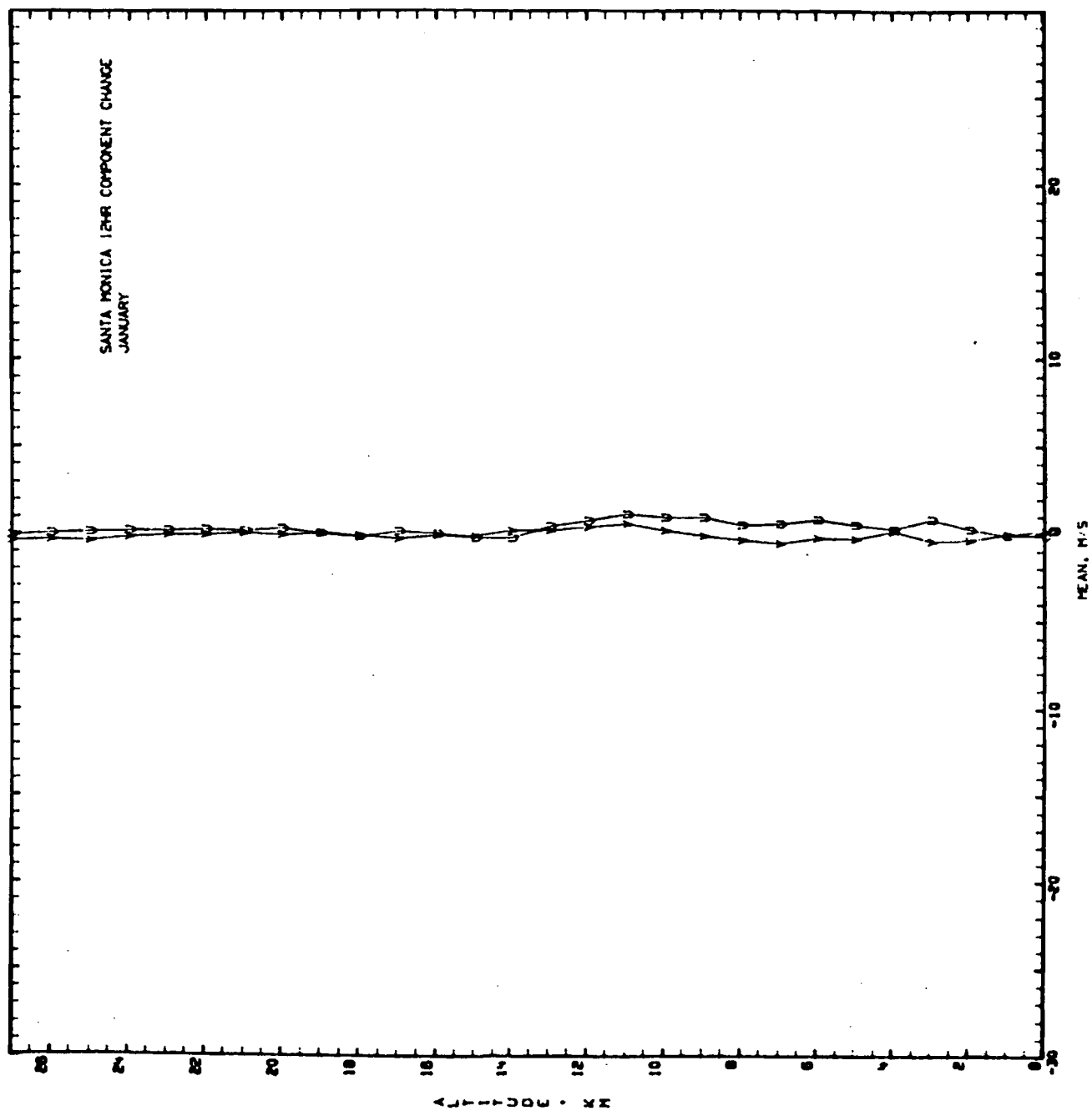
VAFB 7 HR COMPONENT CHANGE
WINTER

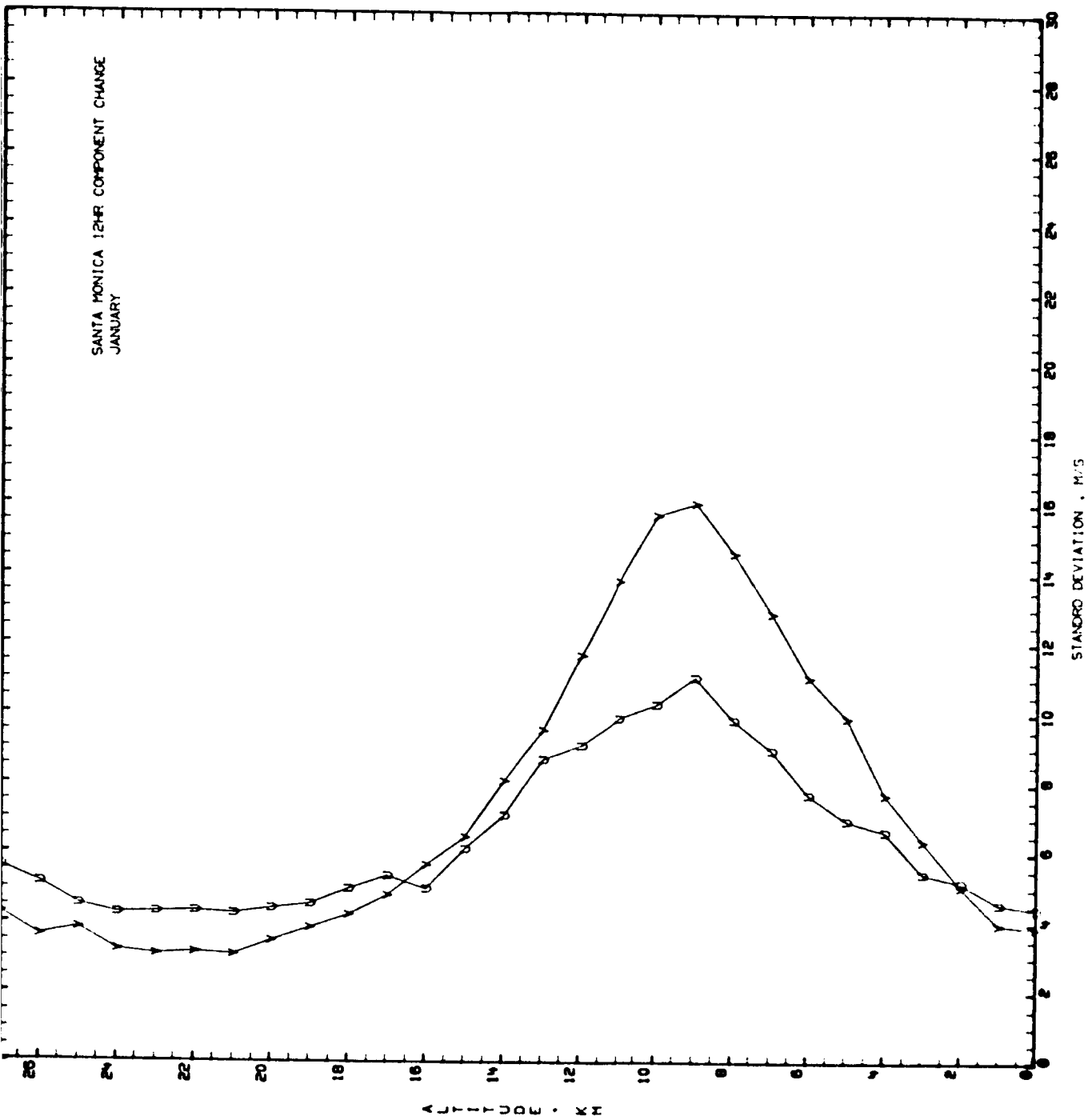


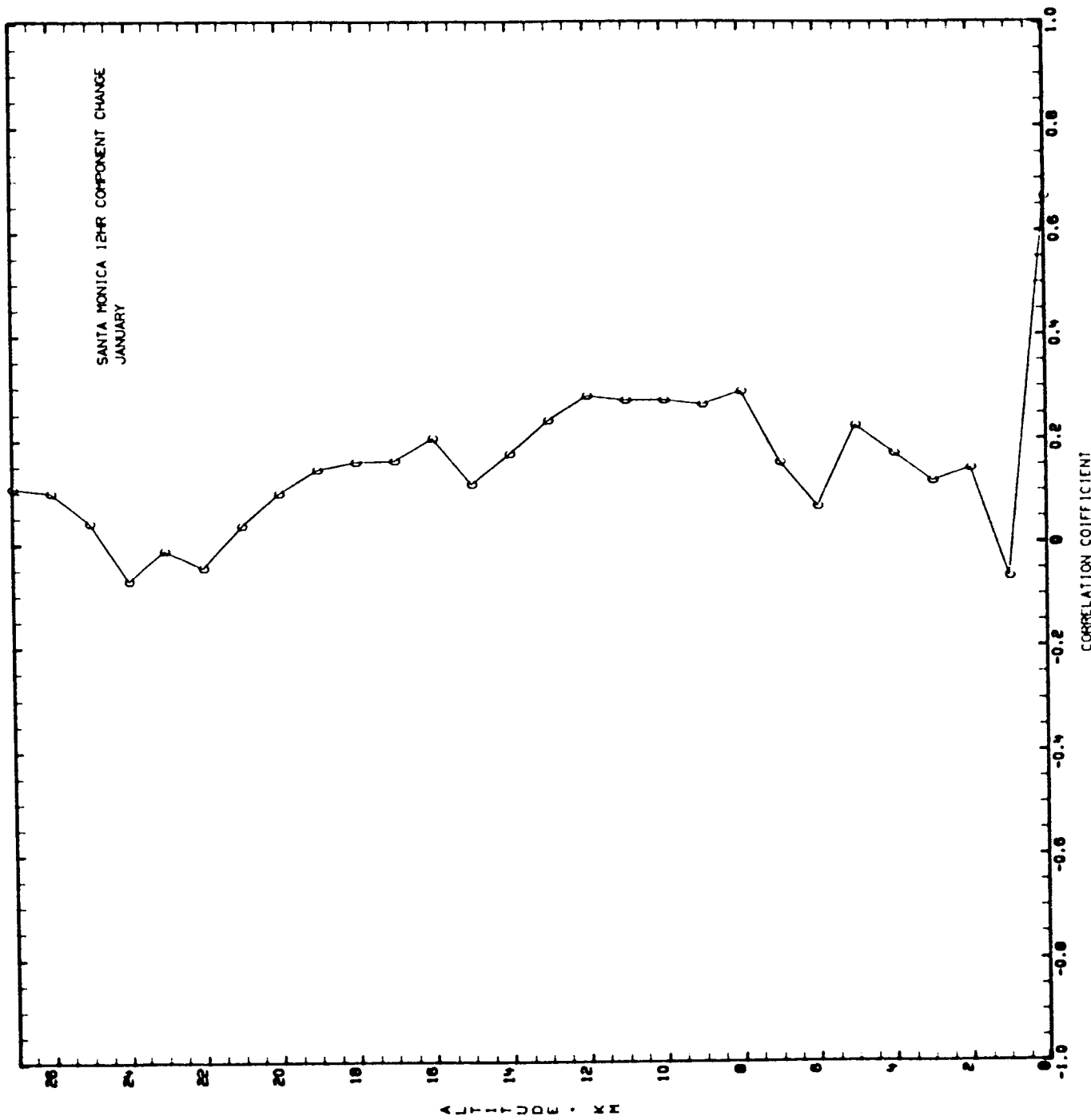


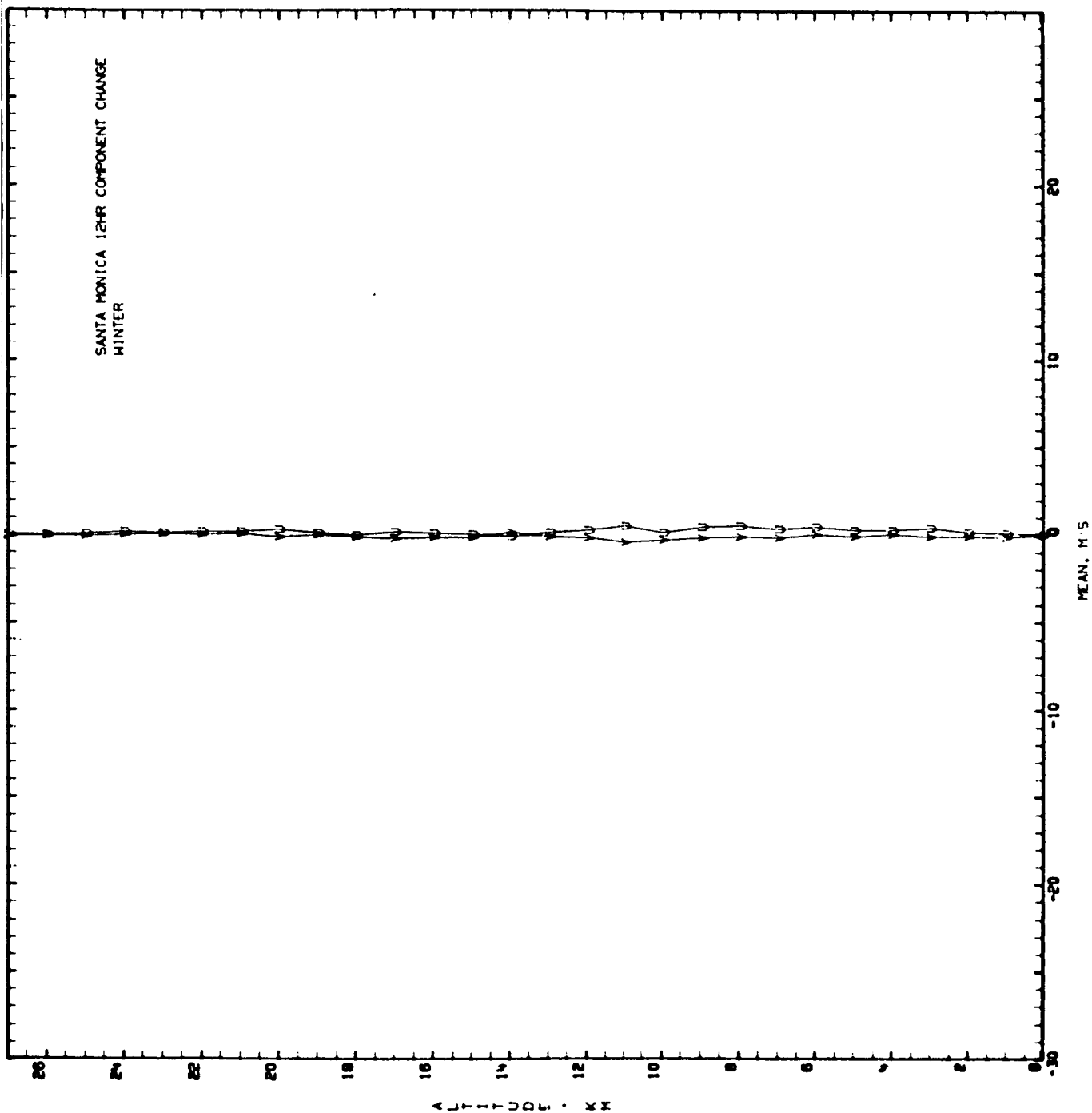
VAFB 7 HR COMPONENT CHANGE
WINTER

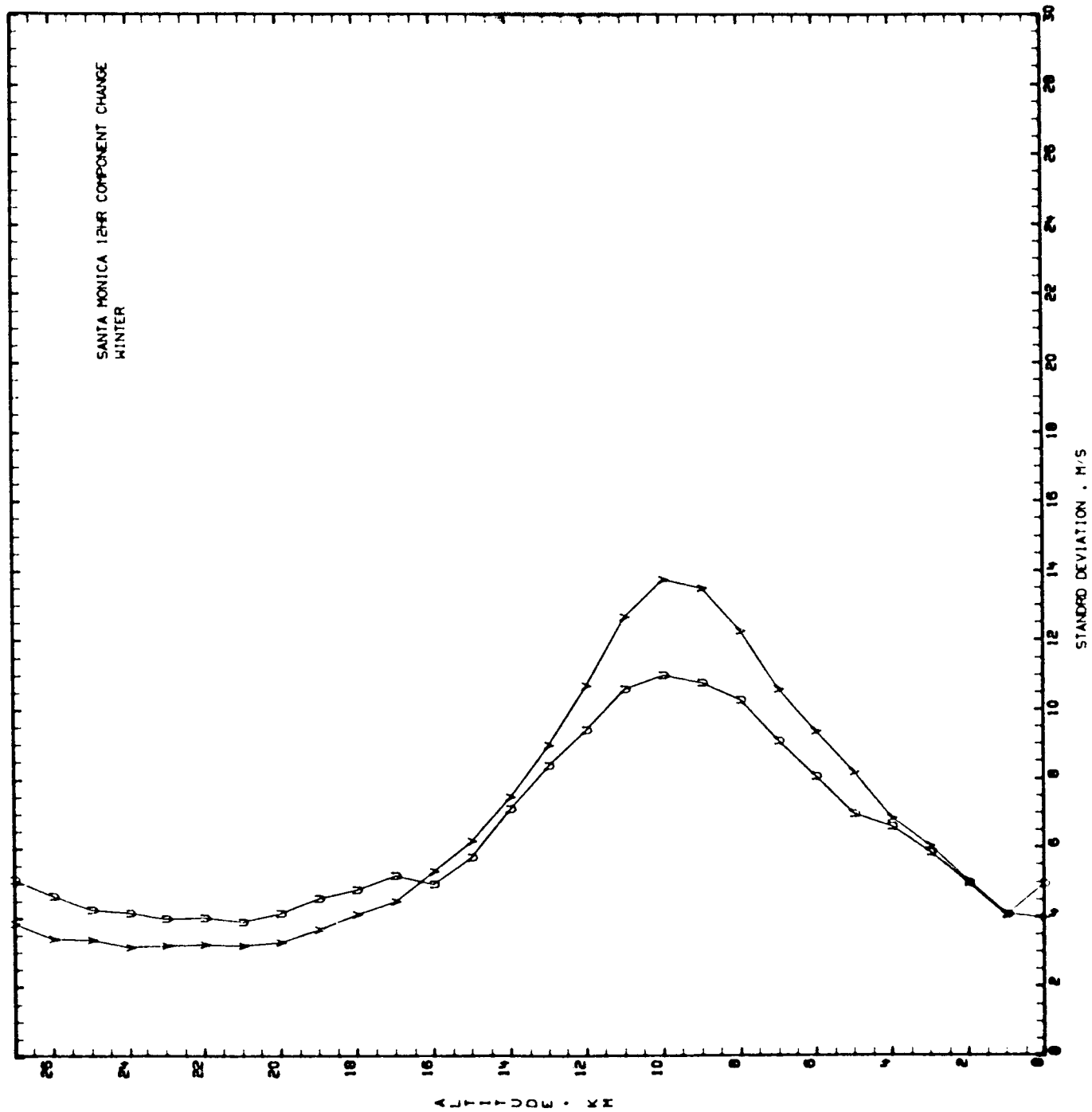




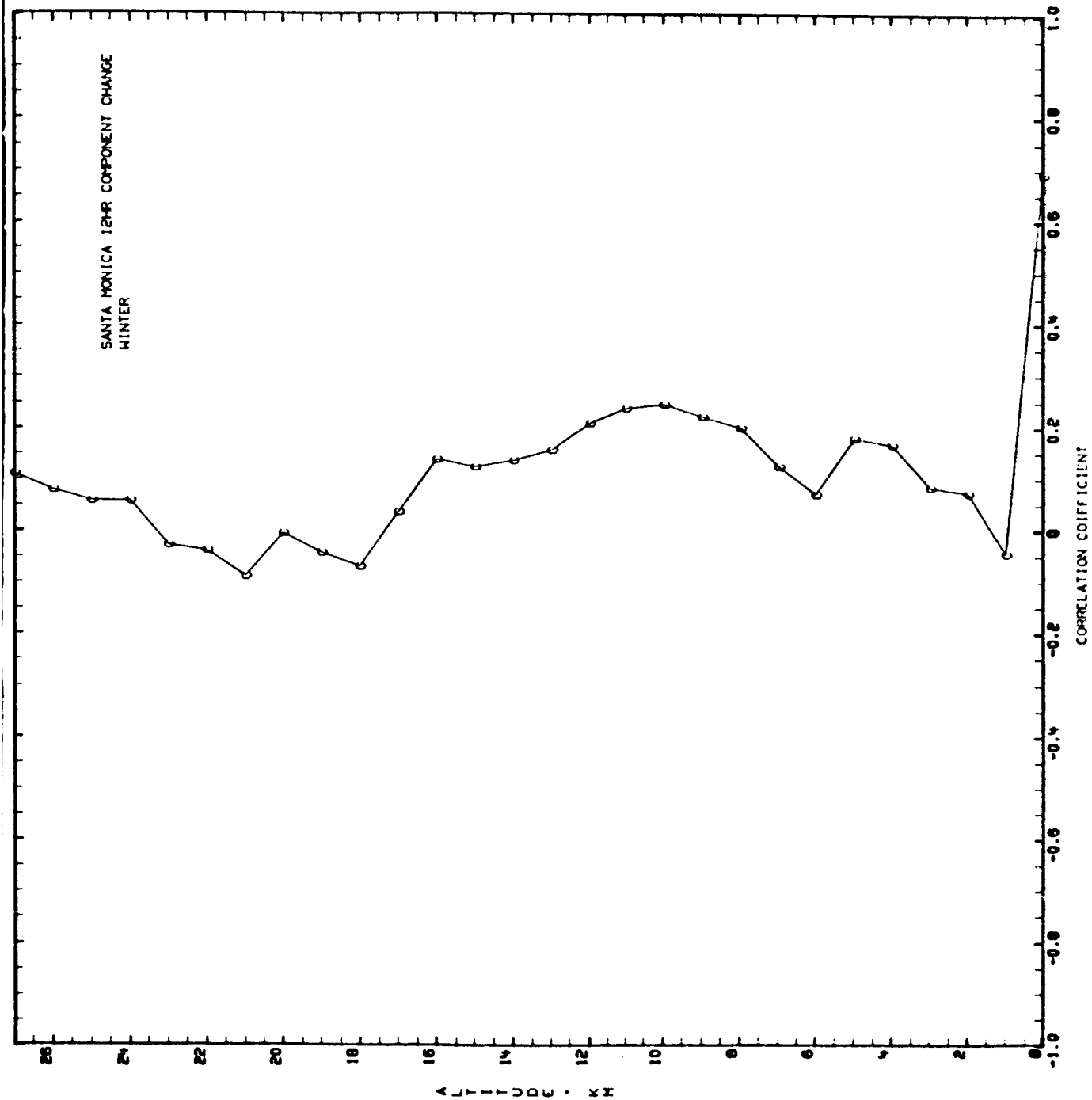








SANTA MONICA 12HR COMPONENT CHANGE
WINTER



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16. ABSTRACT Wind change statistics are analyzed for Vandenberg AFB, California (VAFB) and Kennedy Space Center, Florida (KSC). Means and standard deviations of wind component change and vector wind change modulus within 3-9 and 9-16 km altitude bands are tabulated. The contribution to 3.5 hr wind component change by wind perturbations in various wavelength bands is evaluated. Probability distributions of maximum 3.5 hr wind change in an altitude band are presented and a model for wind change at a specified altitude is tested with data derived from six data bases from VAFB and Santa Monica, California.					
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